This technical report - The Traffic Noise Analysis for this project was prepared under the provisions of the California Department of Transportation Traffic Noise Analysis Protocol, which is based on 23 CFR, Part 772 "Procedures for Abatement of Highway Traffic Noise" (Federal Highway Administration). However, the Draft Environmental Impact Report (EIR) including Section 2.2.7 was prepared under the provisions of CEQA only.

FINAL TECHNICAL NOISE IMPACT ANALYSIS REPORT ADDENDUM

FOR STATE ROUTE 74 (ORTEGA HIGHWAY) FROM CALLE ENTRADERO TO 0.43 KM EAST OF LA PATA AVENUE

12-ORA-74 KP 1.7/4.7 (PM 1.06/2.9)

EA No. 086900

July 2008

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12-ORA-74 KP 1.7/4.7 (PM 1.06/2.9)

EA No. 086900

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July 2008

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I. NOISE IMPACT TECHNICAL REPORT ADDENDUM

A. INTRODUCTION

This is an addendum prepared by LSA Associates, Inc. that updates the Final Technical Noise Impact Analysis Report for State Route 74 (SR-74) (Ortega Highway) from Calle Entradero to 0.43 KM east of La Pata Avenue in the County of Orange dated June 27, 2007. This noise addendum reevaluates the feasibility and reasonableness of all soundwalls located within the project area based on the updated existing and 2035 peak-hour traffic volumes, vehicle mix, reasonable allowance, and estimated soundwall construction cost. This addendum also provides additional analysis on receptors that would be potentially exposed to a severe traffic noise level, soundwall noise reflections (parallel barrier analysis), and potential ground-borne noise and vibration impacts from long-term traffic operations and construction of the proposed project.

The topographic map and the proposed project alignment for the Final Technical Noise Impact Analysis Report for Ortega Highway dated June 27, 2007, was prepared in metric units and converted to English units for the purpose of the SOUND2000 noise prediction model. The unit of measurement in this noise addendum is expressed in both metric and English units to be consistent with the Final Technical Noise Impact Analysis Report for Ortega Highway.

B. TRAFFIC NOISE IMPACTS

The updated existing and 2035 peak-hour traffic volumes and vehicle mix are summarized in Table A. Based on the updated traffic input parameters, the existing and 2035 noise level results are shown in Table B. As shown in Table B, of the 57 modeled receptors, 22 receptors under the existing traffic condition and 28 receptors under the 2035 traffic conditions are predicted to approach or exceed the 67 dBA L_{eq} (equivalent continuous sound level measured in A-weighted decibels) Noise Abatement Criteria (NAC). In addition to Table B, it should be noted that the change in noise levels from existing to future 2035 traffic conditions is -0.1 and -1.0 for Receptor Nos. 8 and 9, respectively. Traffic noise levels under the future 2035 condition resulted in a slightly lower noise level due to the proposed improvements that would shift the proposed roadway alignment to the north (away from Receptor Nos. 8 and 9). Therefore, the hinge of the terrain on the south side of Ortega Highway would provide more shielding for Receptor Nos. 8 and 9. Tables C and D show the with and without barrier modeling results for the with and without wrap-around wall scenario, respectively. As shown in Tables C and D, of the 14 soundwalls evaluated, 11 soundwalls were determined to be feasible. Table E lists the feasible soundwalls along with their height, approximate length, location, top of wall elevation, and beginning and ending station numbers for both with and without wrap-around wall scenarios. SW-6A, SW-7, and SW-8 were determined to be not feasible because these soundwalls would not provide a noise level reduction of 5 dBA or more and therefore are not listed in Table E.

Table A: Traffic Input Parameters

Year	Direction	Peak-Hour Traffic Volumes	Vehicle Percentage			Traffic Volume for Noise Modeling		
			Auto	Med	Heavy	Auto	Med	Heavy
Existing	Ortega Highway WB	1,617	87.43%	6.01%	6.56%	1,414	97	106
	Ortega Highway EB	913	74.89%	6.30%	18.81%	684	58	172
2035	Ortega Highway WB	2,188	87.43%	6.01%	6.56%	1,913	131	144
	Ortega Highway EB	1,258	74.89%	6.30%	18.81%	942	79	237

Source: LSA Associates, Inc., May 2008.
EB = eastbound
WB = westbound

Table B: Projected Noise Levels

Receptor No.	Existing Noise Levels	Future Noise Levels	Change from Existing Noise Levels
Eastbound Side			
1	**70.9**[1]	**72.8**	1.9
1A	58.4	60.3	1.9
2	61.8	63.7	1.9
2A	55.9	57.8	1.9
2B	55.4	57.3	1.9
3A	54.0	55.9	1.9
R-2 K-1	60.5	62.1	1.6
4	60.2	61.8	1.6
4A	54.2	55.9	1.7
5	59.7	61.3	1.6
5B	62.7	64.5	1.8
6	**68.6**	**70.1**	1.5
6A	56.7	58.6	1.9
7	**70.6**	**71.4**	0.8
7A	55.8	57.4	1.6
8	**65.8**	**65.7**	-0.1
8A	57.5	58.7	1.2
9	**67.0**	**66.0**	-1.0
10	**69.6**	**70.1**	0.5
10A	58.4	59.4	1.0
11	**70.2**	**70.4**	0.2
11A	57.9	59.2	1.3
12	64.2	65.2	1.0
13	65.2	**66.2**	1.0
13A	56.6	58.2	1.6
14	64.3	**65.5**	1.2
14A	54.0	55.6	1.6
R-1	63.6	64.8	1.2
15	62.9	64.2	1.3
15A	53.1	54.8	1.7

Table B: Projected Noise Levels

Receptor No.	Existing Noise Levels	Future Noise Levels	Change from Existing Noise Levels
16 K-3	65.1	**66.2**	1.1
16A	53.9	55.6	1.7
17	64.1	65.3	1.2
17B	65.2	**66.6**	1.4
17A	59.2	60.5	1.3
18	**66.9**	**66.9**	0.0
18A	56.6	58.4	1.8
19	63.6	64.3	0.7
19A	54.9	56.7	1.8
20	62.8	64.3	1.5
21	63.7	**65.7**	2.0
21M	**69.5**	**71.8**	2.3
21N	**66.2**	**68.3**	2.1
Westbound Side			
22	**69.3**	**71.3**	2.0
23	**66.3**	**68.4**	2.1
24	62.2	64.1	1.9
25	**65.8**	**67.9**	2.1
26	**67.6**	**69.6**	2.0
27	63.4	**65.5**	2.1
28 K4	**67.2**	**69.6**	2.4
29	**69.9**	**72.5**	2.6
30	**71.1**	**73.0**	1.9
31 K5	**71.4**	**77.1**	5.7
32	**68.5**	**73.8**	5.3
33	**68.0**	**73.0**	5.0
34	**69.1**	**73.6**	4.5
35	**68.6**	**73.5**	4.9

Source: LSA Associates, Inc., May 2008.

[1] Numbers in bold represent noise levels that approach or exceed the Noise Abatement Criteria (NAC).

Table C: Summary of Predicted Noise Levels (With Wrap-Around Wall[1])

No.	SW No.	Rec No.	Land Use	Activity Category	Existing Noise Levels	Future (Worst-Case)	With Barrier H = 2.4 m (8 ft)		With Barrier H = 3.05 m (10 ft)		With Barrier H = 3.7 m (12 ft)		With Barrier H = 4.3 m (14 ft)		With Barrier H = 4.9 m (16 ft)		Critical Receiver No.
							L_{eq}	I.L.[2]	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	
Eastbound Side																	
1	SW-1	1	SFR[3]	B(67)	**70.9**[4]	**72.8**	**68.0**	4.8	65.2	7.6[5]	63.1	9.7	61.5	11.3	60.2	12.6	1
2	SW-1	1A	SFR	B(67)	58.4	60.3	--[6]	--	--	--	--	--	--	--	--	--	
3	SW-1	2	SFR	B(67)	61.8	63.7	--	--	--	--	--	--	--	--	--	--	
4	SW-1	2A	SFR	B(67)	55.9	57.8	--	--	--	--	--	--	--	--	--	--	
5	SW-1	2B	SFR	B(67)	55.4	57.3	--	--	--	--	--	--	--	--	--	--	
6	SW-1	3A	SFR	B(67)	54.0	55.9	--	--	--	--	--	--	--	--	--	--	
7	SW-1	R-2 K-1	SFR	B(67)	60.5	62.1	--	--	--	--	--	--	--	--	--	--	
8	SW-1	4	SFR	B(67)	60.2	61.8	--	--	--	--	--	--	--	--	--	--	
9	SW-1	4A	SFR	B(67)	54.2	55.9	--	--	--	--	--	--	--	--	--	--	
10	SW-1	5	SFR	B(67)	59.7	61.3	--	--	--	--	--	--	--	--	--	--	
11	SW-1	5B	SFR	B(67)	62.7	64.5	--	--	--	--	--	--	--	--	--	--	
12	SW-2	6	SFR	B(67)	**68.6**	**70.1**	64.8	5.3	63.1	7.0	61.5	8.6	60.2	9.9	59.2	10.9	
13	SW-2	6A	SFR	B(67)	56.7	58.6	56.6	2.0	55.5	3.1	54.6	4.0	53.8	4.8	53.5	5.1	
14	SW-2	7	SFR	B(67)	**70.6**	**71.4**	65.3	6.1	63.5	7.9	61.9	9.5	60.5	10.9	59.4	12.0	7
15	SW-2	7A	SFR	B(67)	55.8	57.4	55.7	1.7	54.5	2.9	53.2	4.2	52.1	5.3	51.3	6.1	
16	SW-2	8	SFR	B(67)	**65.8**	**65.7**	62.2	3.5	60.7	5.0	59.4	6.3	58.3	7.4	57.5	8.2	
17	SW-2	8A	SFR	B(67)	57.5	58.7	55.3	3.4	53.8	4.9	52.4	6.3	51.3	7.4	50.4	8.3	
18	SW-2	9	SFR	B(67)	**67.0**	**66.0**	63.6	2.4	61.9	4.1	60.4	5.6	59.1	6.9	58.0	8.0	
19	SW-2	10	SFR	B(67)	**69.6**	**70.1**	**65.8**	4.3	63.8	6.3	62.1	8.0	60.6	9.5	59.3	10.8	
20	SW-2	10A	SFR	B(67)	58.4	59.4	57.4	2.0	56.1	3.3	54.6	4.8	53.4	6.0	52.4	7.0	
21	SW-3[7]	11	SFR	B(67)	**70.2**	**70.4**	**66.5**	3.9	64.4	6.0	62.6	7.8	61.1	9.3	61.0	9.4	11
22	SW-3[7]	11A	SFR	B(67)	57.9	59.2	57.9	1.3	57.0	2.2	56.1	3.1	55.4	3.8	55.2	4.0	
23	SW-3[7]	12	SFR	B(67)	64.2	65.2	62.3	2.9	60.7	4.5	59.4	5.8	58.2	7.0	57.8	7.4	
24	SW-3[7]	13	SFR	B(67)	65.2	**66.2**	63.4	2.8	61.8	4.4	60.4	5.8	59.2	7.0	58.5	7.7	
25	SW-3[7]	13A	SFR	B(67)	56.6	58.2	56.7	1.5	55.2	3.0	53.7	4.5	52.4	5.8	51.8	6.4	
26	SW-3[7]	14	SFR	B(67)	64.3	**65.5**	63.1	2.4	61.6	3.9	60.2	5.3	59.0	6.5	58	7.5	
27	SW-3[7]	14A	SFR	B(67)	54.0	55.6	54.9	0.7	53.6	2.0	52.2	3.4	51.0	4.6	50.3	5.3	
28	SW-3[7]	R-1	SFR	B(67)	63.6	64.8	62.7	2.1	61.1	3.7	59.8	5.0	58.7	6.1	57.8	7.0	
29	SW-3[7]	15	SFR	B(67)	62.9	64.2	62.2	2.0	60.7	3.5	59.5	4.7	58.5	5.7	57.8	6.4	
30	SW-3[7]	15A	SFR	B(67)	53.1	54.8	54.2	0.6	53.0	1.8	51.7	3.1	50.6	4.2	49.8	5.0	
31	SW-3[7]	16 K-3	SFR	B(67)	65.1	**66.2**	62.9	3.3	61.3	4.9	59.9	6.3	58.8	7.4	57.8	8.4	
32	SW-3[7]	16A	SFR	B(67)	53.9	55.6	54.9	0.7	53.7	1.9	52.5	3.1	51.5	4.1	50.8	4.8	
33	SW-3[7]	17	SFR	B(67)	64.1	65.3	63.1	2.2	61.5	3.8	60.1	5.2	58.9	6.4	57.9	7.4	
34	SW-3[7]	17B	SFR	B(67)	65.2	**66.6**	**66.3**	0.3	**65.7**	0.9	65.2	1.4	64.9	1.7	64.7	1.9	
35	SW-4	17A	SFR	B(67)	59.2	60.5	59.1	1.4	58.0	2.5	56.8	3.7	55.8	4.7	55.0	5.5	
36	SW-4	18	SFR	B(67)	**66.9**	**66.9**	63.9	3.0	62.1	4.8	60.5	6.4	59.2	7.7	58.1	8.8	18
37	SW-4	18A	SFR	B(67)	56.6	58.4	56.5	1.9	55.2	3.2	54.1	4.3	53.2	5.2	52.5	5.9	
38	SW-4	19	SFR	B(67)	63.6	64.3	62.2	2.1	60.6	3.7	59.2	5.1	58.1	6.2	57.3	7.0	

Table C: Summary of Predicted Noise Levels (With Wrap-Around Wall[1])

No.	SW No.	Rec No.	Land Use	Activity Category	Existing Noise Levels	Future (Worst-Case)	With Barrier H = 2.4 m (8 ft)		With Barrier H = 3.05 m (10 ft)		With Barrier H = 3.7 m (12 ft)		With Barrier H = 4.3 m (14 ft)		With Barrier H = 4.9 m (16 ft)		Critical Receiver No.
							L_{eq}	I.L.[2]	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	
39	SW-5	19A	SFR	B(67)	54.9	56.7	56.3	0.4	55.6	1.1	54.8	1.9	54.2	2.5	53.7	3.0	
40	SW-5	20	SFR	B(67)	62.8	64.3	62.5	1.8	60.8	3.5	59.3	5.0	58.1	6.2	57.2	7.1	
41	SW-5	21	SFR	B(67)	63.7	**65.7**	63.5	2.2	62.0	3.7	60.7	5.0	59.5	6.2	58.5	7.2	21
42	SW-6	21M	SFR	B(67)	**69.5**	**71.8**	**69.1**	2.7	**68.7**	3.1	**67.2**	4.6	**66.1**	5.7	65.3	6.5	21M
43	SW-6A	21N	SFR	B(67)	**66.2**	**68.3**	**67.3**	1.0	**68.1**	0.2	**66.4**	1.9	**66.0**	2.3	**65.7**	2.6	
Westbound Side																	
1	SW-7	22	SFR	B(67)	**69.3**	**71.3**	**70.7**	0.6	**70.5**	0.8	**69.5**	1.8	**69.1**	2.2	**68.0**	3.3	
2	SW-7	23	SFR	B(67)	**66.3**	**68.4**	**67.9**	0.5	**67.7**	0.7	**67.2**	1.2	**66.7**	1.7	**66.2**	2.2	
3	SW-7	24	SFR	B(67)	62.2	64.1	64.1	0.0	64.0	0.1	63.6	0.5	63.3	0.8	63.1	1.0	
4	SW-7	25	SFR	B(67)	**65.8**	**67.9**	**67.4**	0.5	**67.1**	0.8	**66.5**	1.4	**66.1**	1.8	65.3	2.6	
5	SW-7	26	SFR	B(67)	**67.6**	**69.6**	**69.5**	0.1	**69.0**	0.6	**68.7**	0.9	**67.8**	1.8	**67.0**	2.6	
6	SW-8	27	SFR	B(67)	63.4	**65.5**	65.0	0.5	64.7	0.8	64.2	1.3	63.8	1.7	63.1	2.4	
7	SW-9	28 K4	SFR	B(67)	**67.2**	**69.6**	**68.4**	1.2	**68.0**	1.6	**67.4**	2.2	**67.2**	2.4	**66.8**	2.8	
8	SW-9	29	SFR	B(67)	**69.9**	**72.5**	**69.9**	2.6	**69.1**	3.4	**68.0**	4.5	**67.2**	5.3	**66.1**	6.4	29
9	SW-10	30	SFR	B(67)	**71.1**	**73.0**	**71.5**	1.5	**70.1**	2.9	**68.9**	4.1	**67.5**	5.5	**65.9**	7.1	30
10	SW-10	31 K5	SFR	B(67)	**71.4**	**77.1**	**74.4**	2.7	**73.5**	3.6	**72.3**	4.8	**71.1**	6.0	**70.2**	6.9	
11	SW-11	32	SFR	B(67)	**68.5**	**73.8**	**72.2**	1.6	**70.5**	3.3	**69.0**	4.8	**67.9**	5.9	**67.1**	6.7	32
12	SW-12	33	SFR	B(67)	**68.0**	**73.0**	**70.5**	2.5	**69.2**	3.8	**68.1**	4.9	**67.3**	5.7	**66.7**	6.3	
13	SW-12	34	SFR	B(67)	**69.1**	**73.6**	**72.1**	1.5	**70.7**	2.9	**69.2**	4.4	**67.7**	5.9	**66.6**	7.0	34
14	SW-13	35	SFR	B(67)	**68.6**	**73.5**	**71.6**	1.9	**69.9**	3.6	**68.4**	5.1	**67.1**	6.4	**66.0**	7.5	35

Source: LSA Associates, Inc., June 2008.

1 With wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

2 I.L.: Insertion Loss.

3 SFR = Single-Family Residence

4 Numbers in bold represent noise levels that approach or exceed the NAC.

5 Numbers underlined have been attenuated by at least 5 dBA (i.e., feasible wall height)

6 No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC.

7 Soundwall modeling for SW-3 under the 16 ft height column was modeled with a 4.3 m (14 ft) high wall from STA 27+06 to STA 28+43 and a 4.9 m (16 ft) high wall from STA 28+43 to STA 30+76.5. Station number STA 28+43 is based on current design plans provided by the Department District 12 Design Branch.

Table D: Summary of Predicted Noise Levels (Without Wrap-Around Wall[1])

No.	SW No.	Rec No.	Land Use	Activity Category	Existing Noise Levels	Future (Worst-Case)	With Barrier H = 2.4 m (8 ft)		With Barrier H = 3.05 m (10 ft)		With Barrier H = 3.7 m (12 ft)		With Barrier H = 4.3 m (14 ft)		With Barrier H = 4.9 m (16 ft)		Critical Receiver No.
							L_{eq}	I.L.[2]	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	
Eastbound Side																	
1	SW-1	1	SFR[3]	B(67)	**70.9**[4]	**72.8**	**68.0**	4.8	**65.5**	7.3[5]	63.6	9.2	62.2	10.6	61.3	11.5	1
2	SW-1	1A	SFR	B(67)	58.4	60.3	--[6]	--	--	--	--	--	--	--	--	--	
3	SW-1	2	SFR	B(67)	61.8	63.7	--	--	--	--	--	--	--	--	--	--	
4	SW-1	2A	SFR	B(67)	55.9	57.8	--	--	--	--	--	--	--	--	--	--	
5	SW-1	2B	SFR	B(67)	55.4	57.3	--	--	--	--	--	--	--	--	--	--	
6	SW-1	3A	SFR	B(67)	54.0	55.9	--	--	--	--	--	--	--	--	--	--	
7	SW-1	R-2 K-1	SFR	B(67)	60.5	62.1	--	--	--	--	--	--	--	--	--	--	
8	SW-1	4	SFR	B(67)	60.2	61.8	--	--	--	--	--	--	--	--	--	--	
9	SW-1	4A	SFR	B(67)	54.2	55.9	--	--	--	--	--	--	--	--	--	--	
10	SW-1	5	SFR	B(67)	59.7	61.3	--	--	--	--	--	--	--	--	--	--	
11	SW-1	5B	SFR	B(67)	62.7	64.5	--	--	--	--	--	--	--	--	--	--	
12	SW-2	6	SFR	B(67)	**68.6**	**70.1**	64.8	5.3	63.1	7.0	61.5	8.6	60.2	9.9	59.1	11.0	
13	SW-2	6A	SFR	B(67)	56.7	58.6	56.6	2.0	55.5	3.1	54.6	4.0	53.8	4.8	53.3	5.3	
14	SW-2	7	SFR	B(67)	**70.6**	**71.4**	65.3	6.1	63.5	7.9	61.9	9.5	60.5	10.9	59.3	12.1	7
15	SW-2	7A	SFR	B(67)	55.8	57.4	55.7	1.7	54.6	2.8	53.3	4.1	52.2	5.2	51.3	6.1	
16	SW-2	8	SFR	B(67)	**65.8**	**65.7**	62.2	3.5	60.7	5.0	59.4	6.3	58.3	7.4	57.4	8.3	
17	SW-2	8A	SFR	B(67)	57.5	58.7	55.3	3.4	53.9	4.8	52.7	6.0	51.7	7.0	50.9	7.8	
18	SW-2	9	SFR	B(67)	**67.0**	**66.0**	64.0	2.0	62.6	3.4	61.6	4.4	60.8	5.2	60.2	5.8	
19	SW-2	10	SFR	B(67)	**69.6**	**70.1**	66.2	3.9	64.7	5.4	63.6	6.5	62.8	7.3	62.2	7.9	
20	SW-2	10A	SFR	B(67)	58.4	59.4	57.9	1.5	56.8	2.6	55.8	3.6	55.0	4.4	54.4	5.0	
21	SW-3[7]	11	SFR	B(67)	**70.2**	**70.4**	**67.1**	3.3	**65.7**	4.7	64.7	5.7	64.0	6.4	63.9	6.5	11
22	SW-3[7]	11A	SFR	B(67)	57.9	59.2	58.4	0.8	57.7	1.5	57.1	2.1	56.6	2.6	56.4	2.8	
23	SW-3[7]	12	SFR	B(67)	64.2	65.2	62.4	2.8	60.9	4.3	59.7	5.5	58.7	6.5	58.4	6.8	
24	SW-3[7]	13	SFR	B(67)	65.2	**66.2**	63.4	2.8	61.8	4.4	60.4	5.8	59.2	7.0	58.5	7.7	
25	SW-3[7]	13A	SFR	B(67)	56.6	58.2	56.7	1.5	55.2	3.0	53.8	4.4	52.5	5.7	52.0	6.2	
26	SW-3[7]	14	SFR	B(67)	64.3	**65.5**	63.1	2.4	61.6	3.9	60.2	5.3	59.0	6.5	58.0	7.5	
27	SW-3[7]	14A	SFR	B(67)	54.0	55.6	54.9	0.7	53.6	2.0	52.3	3.3	51.1	4.5	50.3	5.3	
28	SW-3[7]	R-1	SFR	B(67)	63.6	64.8	62.7	2.1	61.1	3.7	59.8	5.0	58.7	6.1	57.8	7.0	
29	SW-3[7]	15	SFR	B(67)	62.9	64.2	62.2	2.0	60.7	3.5	59.5	4.7	58.5	5.7	57.8	6.4	
30	SW-3[7]	15A	SFR	B(67)	53.1	54.8	54.2	0.6	53.0	1.8	51.7	3.1	50.6	4.2	49.8	5.0	
31	SW-3[7]	16 K-3	SFR	B(67)	65.1	**66.2**	62.9	3.3	61.3	4.9	59.9	6.3	58.8	7.4	57.8	8.4	

Table D: Summary of Predicted Noise Levels (Without Wrap-Around Wall[1])

No.	SW No.	Rec No.	Land Use	Activity Category	Existing Noise Levels	Future (Worst-Case)	With Barrier H = 2.4 m (8 ft)		With Barrier H = 3.05 m (10 ft)		With Barrier H = 3.7 m (12 ft)		With Barrier H = 4.3 m (14 ft)		With Barrier H = 4.9 m (16 ft)		Critical Receiver No.
							L_{eq}	I.L.[2]	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	L_{eq}	I.L.	
32	SW-3[7]	16A	SFR	B(67)	53.9	55.6	54.9	0.7	53.7	1.9	52.5	3.1	51.5	4.1	50.8	4.8	
33	SW-3[7]	17	SFR	B(67)	64.1	65.3	63.1	2.2	61.5	3.8	60.1	5.2	58.9	6.4	57.9	7.4	
34	SW-3[7]	17B	SFR	B(67)	65.2	**66.6**	**66.3**	0.3	**65.7**	0.9	65.2	1.4	64.9	1.7	64.7	1.9	

Source: LSA Associates, Inc., June 2008.

1 Without wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

2 I.L.: Insertion Loss.

3 SFR = Single-Family Residence

4 Numbers in bold represent noise levels that approach or exceed the NAC.

5 Numbers underlined have been attenuated by at least 5 dBA (i.e., feasible wall height)

6 No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC.

7 Soundwall modeling for SW-3 under the 16 ft height column was modeled with a 4.3 m (14 ft) high wall from STA 27+12 to STA 28+43 and a 4.9 m (16 ft) high wall from STA 28+43 to STA 30+76.5. Station number STA 28+43 is based on current design plans provided by the Department District 12 Design Branch.

Table E: Feasible Soundwalls

Soundwall No.	Height m (ft)	Approximate Length m (ft)	Location	Top of the Wall Elevations[1]	Station Number[2] Begin	Station Number[2] End	Location of Soundwall in Report Graphics
With Wrap-Around Wall							
1	3.05 (10)	66 (215)	Eastbound Side Right-of-way	Plus 3.05 m (10 ft)	21+58	22+20	Figure A-1
	3.7 (12)	66 (215)		Plus 3.7 m (12 ft)			
	4.3 (14)	66 (215)		Plus 4.3 m (14 ft)			
	4.9 (16)	66 (215)		Plus 4.9 m (16 ft)			
2	2.4 (8)	228 (747)	Eastbound Side Right-of-way	Plus 2.4m (8 ft)	24+65	26+86	Figure A-2
	3.05 (10)	228 (747)		Plus 3.05 m (10 ft)			
	3.7 (12)	228 (747)		Plus 3.7 m (12 ft)			
	4.3 (14)	228 (747)		Plus 4.3 m (14 ft)			
	4.9 (16)	228 (747)		Plus 4.9 m (16 ft)			
3	3.05 (10)	228 (747)	Eastbound Side Right-of-way	Plus 3.05 m (10 ft)	27+06/ 28+43[4]	28+43[4]/ 30+76.5	Figure A-3
	3.7 (12)	374 (1,228)		Plus 3.7 m (12 ft)			
	4.3 (14)	374 (1,228)		Plus 4.3 m (14 ft)			
	4.3/4.9 (14/16)[3]	374 (1,228)		Plus 4.3/4.9 m (14/16 ft)			
4	3.7 (12)	103 (338)	Eastbound Side Right-of-way	Plus 3.7 m (12 ft)	30+93	31+92	Figure A-4
	4.3 (14)	103 (338)		Plus 4.3 m (14 ft)			
	4.9 (16)	103 (338)		Plus 4.9 m (16 ft)			
5	3.7 (12)	123 (404)	Eastbound Side Right-of-way	Plus 3.7 m (12 ft)	32+13.5	33+29	Figure A-4
	4.3 (14)	123 (404)		Plus 4.3 m (14 ft)			
	4.9 (16)	123 (404)		Plus 4.9 m (16 ft)			
6	4.3 (14)	85 (279)	Eastbound Side Right-of-way	Plus 4.3 m (14 ft)	35+38	36+23	Figure A-5
	4.9 (16)	85 (279)		Plus 4.9 m (16 ft)			
9	4.3 (14)	161 (529)	Westbound Side Right-of-way	Plus 4.3 m (14 ft)	25+91	27+53	Figure A-2
	4.9 (16)	161 (529)		Plus 4.9 m (16 ft)			
10	4.3 (14)	145 (475)	Westbound Side Right-of-way	Plus 4.3 m (14 ft)	27+60	29+6.3	Figure A-3
	4.9 (16)	145 (475)		Plus 4.9 m (16 ft)			
11	4.3 (14)	59 (195)	Westbound Side Right-of-way	Plus 4.3 m (14 ft)	29+17	29+74	Figure A-3
	4.9 (16)	59 (195)		Plus 4.9 m (16 ft)			
12	4.3 (14)	168 (552)	Westbound Side Right-of-way	Plus 4.3 m (14 ft)	35+20	36+88.5	Figure A-5
	4.9 (16)	168 (552)		Plus 4.9 m (16 ft)			
13	3.7 (12)	104 (343)	Westbound Side Right-of-way	Plus 3.7 m (12 ft)	36+96	38+00	Figure A-5
	4.3 (14)	104 (343)		Plus 4.3 m (14 ft)			
	4.9 (16)	104 (343)		Plus 4.9 m (16 ft)			
Without Wrap-Around Wall[5]							
1	3.05 (10)	55 (179)	Eastbound Side Right-of-way	Plus 3.05 m (10 ft)	21+65	22+20	Figure B-3
	3.7 (12)	55 (179)		Plus 3.7 m (12 ft)			
	4.3 (14)	55 (179)		Plus 4.3 m (14 ft)			
	4.9 (16)	55 (179)		Plus 4.9 m (16 ft)			
2	2.4 (8)	215 (707)	Eastbound Side Right-of-way	Plus 2.4 m (8 ft)	24+65	26+78	Figure B-2
	3.05 (10)	215 (707)		Plus 3.05 m (10 ft)			
	3.7 (12)	215 (707)		Plus 3.7 m (12 ft)			
	4.3 (14)	215 (707)		Plus 4.3 m (14 ft)			
	4.9 (16)	215 (707)		Plus 4.9 m (16 ft)			
3	3.7 (12)	366 (1,202)	Eastbound Side Right-of-way	Plus 3.7 m (12 ft)	27+12/ 28+43[4]	28+43[4]/ 30+76.5	Figure B-3
	4.3 (14)	366 (1,202)		Plus 4.3 m (14 ft)			
	4.3/4.9 (14/16)[6]	366 (1,202)		Plus 4.3/4.9 m (14/16 ft)			

Source: LSA Associates, Inc., June 2008.

1 From the existing elevation.

2 The station numbers are based on the Department station designation numbering in metric units, as shown on the figures.

3 With wrap-around scenario for SW-3 from STA 27+06 to STA 28+43 is less than 4.5 m (15 ft) from the nearest travel lane, and therefore the maximum height is 4.3 m (14 ft).

4 This station number is based on current design plans provided by the Department District 12 Design Branch.

5 Without wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

6 Without wrap-around scenario for SW-3 from STA 27+12 to STA 28+43 is less than 4.5 m (15 ft) from the nearest travel lane, and therefore the maximum height is 4.3 m (14 ft).

ft = feet

m = meter

Worksheet A of the Protocol was used to determine the reasonable allowance per residence and the total reasonable allowance for each soundwall. The reasonable allowance per residence was calculated with a base allowance of $36,000 and then adjusted using five factors to determine the total reasonable allowance per residence. The five factors include absolute noise level, design year increase over existing noise levels, achievable noise reduction, new highway construction or pre-1978 residences, and the total reasonableness vs. project cost. Worksheet A for the proposed soundwalls is provided in Appendix E.

Worksheet B of the Protocol was used to determine (1) the total allowance for the proposed soundwalls, and (2) whether the total allowance for the soundwalls exceeded 50 percent of the total cost of the project. Since the total allowance was less than 50 percent of the total project cost, no further modifications were required. Worksheet B from the Protocol for the proposed soundwalls is provided in Appendix E. Also, for the purpose of preparing the Environmental Impact Report (EIR) within the City limits, an additional set of Worksheet B forms was prepared to determine whether the total allowance for the soundwalls exceeded 50 percent of the total cost of the project within the City limits. Since the total allowance was less than 50 percent of the total project cost, no further modifications were required. Worksheet B for the proposed soundwalls within the City limits is also provided in Appendix E.

Table F lists the feasible soundwalls along with their height, approximate length, noise attenuation range, number of benefited residences, reasonable allowance per residence, total reasonable allowance, and estimated construction cost, as well as the beginning and ending station numbers for each soundwall, and whether the soundwall is reasonable. As shown in Table F, SW-2 at 3.7 meters (m) (12 feet [ft]) to 4.9 m (16 ft) under the with wrap-around wall scenario and 3.05 m (10 ft) to 4.9 m (16 ft) under the without wrap-around wall scenario were determined to be reasonable because the estimated soundwall construction cost does not exceed the total reasonable allowance. Also, SW-3 with a 4.3 m (14 ft) wall from STA 27+06 (27+12) to STA 28+43 and a 4.9 m (16 ft) wall from STA 28+43 to STA 30+76.5, under both with and without wrap-around wall scenarios, was determined to be reasonable. It should be noted the SW-3 from STA 27+06 (27+12) to STA 28+43 is located less than 4.5 m (15 ft) from the nearest travel lane, and therefore the maximum soundwall height is 4.3 m (14 ft). SW-1, SW-4, SW-5, SW-6, SW-9, SW-10, SW-11, SW-12, SW-13, and the remaining soundwall heights for SW-2 and SW-3 for both with and without wrap-around wall scenarios were determined to be not reasonable because the estimated soundwall construction cost exceeds the total reasonable allowance. Figures A-1 through A-9 show the receptor and soundwall locations (with the wrap-around wall scenario). Figures B-1 through B-3 also show the receptor and soundwall locations of SW-1, SW-2, and SW-3 under the without wrap-around wall scenario. Figures A-1 through A-9 and Figures B-1 through B-3 are provided in Appendix A.

Table F: Total Reasonable Allowance per Soundwall

Soundwall No.	Height m (ft)	Approximate Length m (ft)	Noise Attenuation (dBA)	Number of Benefited Residences[1]	Reasonable Allowance per Residence	Total Reasonable Allowance	Estimated Soundwall Construction Cost[2]	Station Number[3]		Reasonable?
								Begin	End	
With Wrap-Around Wall[4]										
1	3.05 (10)	66 (215)	7.9	1	$52,000	$52,000	$93,150	21+58	22+20	No
	3.7 (12)	66 (215)	9.7	1	$54,000	$54,000	$110,590			No
	4.3 (14)	66 (215)	11.3	1	$54,000	$54,000	$128,580			No
	4.9 (16)	66 (215)	12.9	1	$54,000	$54,000	$142,030			No
2	2.4 (8)	228 (747)	6.1	3	$52,000	$156,000	$272,000	24+65	26+86	No
	3.05 (10)	228 (747)	7.9	6	$52,000	$312,000	$321,390			No
	3.7 (12)	228 (747)	9.5	8	$54,000	$432,000	$381,560			Yes
	4.3 (14)	228 (747)	10.9	11	$54,000	$594,000	$443,620			Yes
	4.9 (16)	228 (747)	12.0	13	$56,000	$728,000	$490,030			Yes
3	3.05 (10)	374 (1,228)	6.0	1	$42,000	$42,000	$528,390	27+06/ 28+43[6]	28+43[6]/ 30+76.5	No
	3.7 (12)	374 (1,228)	7.8	12	$42,000	$504,000	$627,320			No
	4.3 (14)	374 (1,228)	9.3	14	$44,000	$616,000	$729,360			No
	4.3/4.9 (14/16)[5]	374 (1,228)	9.4	19	$44,000	$836,000	$788,060			Yes
4	3.7 (12)	103 (338)	6.4	2	$40,000	$80,000	$172,580	30+93	31+92	No
	4.3 (14)	103 (338)	7.7	3	$40,000	$120,000	$200,660			No
	4.9 (16)	103 (338)	8.8	4	$40,000	$160,000	$221,650			No
5	3.7 (12)	123 (404)	5.0	2	$48,000	$96,000	$206,100	32+13.5	33+29	No
	4.3 (14)	123 (404)	6.2	2	$50,000	$100,000	$239,620			No
	4.9 (16)	123 (404)	7.2	2	$50,000	$100,000	$264,690			No
6	4.3 (14)	85 (279)	5.7	1	$50,000	$50,000	$165,590	35+38	36+23	No
	4.9 (16)	85 (279)	6.5	1	$52,000	$52,000	$182,910			No
9	4.3 (14)	161 (529)	5.3	1	$50,000	$50,000	$313,650	25+91	27+53	No
	4.9 (16)	161 (529)	6.4	1	$52,000	$52,000	$346,460			No
10	4.3 (14)	145 (475)	5.5	2	$56,000	$112,000	$282,480	27+60	29+6.3	No
	4.9 (16)	145 (475)	7.1	2	$56,000	$112,000	$312,030			No
11	4.3 (14)	59 (195)	5.9	1	$52,000	$52,000	$114,940	29+17	29+74	No
	4.9 (16)	59 (195)	6.7	1	$54,000	$54,000	$126,960			No
12	4.3 (14)	168 (552)	5.9	2	$52,000	$104,000	$327,280	35+20	36+88.5	No
	4.9 (16)	168 (552)	7.0	2	$54,000	$108,000	$361,520			No
13	3.7 (12)	104 (343)	5.1	1	$52,000	$52,000	$174,260	36+96	38+00	No
	4.3 (14)	104 (343)	6.4	1	$54,000	$54,000	$202,600			No
	4.9 (16)	104 (343)	7.5	1	$54,000	$54,000	$223,800			No

Table F: Total Reasonable Allowance per Soundwall

Soundwall No.	Height m (ft)	Approximate Length m (ft)	Noise Attenuation (dBA)	Number of Benefited Residences[1]	Reasonable Allowance per Residence	Total Reasonable Allowance	Estimated Soundwall Construction Cost[2]	Station Number[3]		Reasonable?
								Begin	End	
Without Wrap-Around Wall[7]										
1	3.05 (10)	55 (179)	7.3	1	$52,000	$52,000	$77,620	21+65	22+20	No
	3.7 (12)	55 (179)	9.2	1	$54,000	$54,000	$92,160			No
	4.3 (14)	55 (179)	10.6	1	$54,000	$54,000	$107,150			No
	4.9 (16)	55 (179)	11.5	1	$54,000	$54,000	$118,360			No
2	2.4 (8)	215 (707)	6.1	3	$52,000	$156,000	$257,290	24+65	26+78	No
	3.05 (10)	215 (707)	7.9	6	$52,000	$312,000	$304,010			Yes
	3.7 (12)	215 (707)	9.5	7	$54,000	$378,000	$360,930			Yes
	4.3 (14)	215 (707)	10.9	10	$54,000	$540,000	$419,630			Yes
	4.9 (16)	215 (707)	12.1	13	$56,000	$728,000	$463,530			Yes
3	3.7 (12)	366 (1,202)	5.7	12	$40,000	$480,000	$613,840	27+12/ 28+43[6]	28+43[6]/ 30+76.5	No
	4.3 (14)	366 (1,202)	6.4	14	$42,000	$588,000	$713,680			No
	4.3/4.9 (14/16)[8]	366 (1,202)	6.5	19	$42,000	$798,000	$742,550			Yes

Source: LSA Associates, Inc., June 2008.

1 Number of residences that are attenuated by 5 dBA or more by the modeled barrier.

2 Construction cost calculations provided by the Department District 12 Design Branch. These costs include excavation for pile caps, pile caps, masonry blocks, 400mm CIDH pilings, 15 percent for drainage, traffic and landscape, and 10 percent contingency

3 The station numbers are based on the Department station designation numbering in metric units, as shown on the figures.

4 With wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

5 With wrap-around scenario for SW-3 from STA 27+06 to STA 28+43 is less than 4.5 m (15 ft) from the nearest travel lane and therefore the maximum height is 4.3 m (14 ft).

6 This station number is based on current design plans provided by the Department District 12 Design Branch.

7 Without wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

8 Without wrap-around scenario for SW-3 from STA 27+12 to STA 28+43 is less than 4.5 m (15 ft) from the nearest travel lane and therefore the maximum height is 4.3 m (14 ft).

Also, as shown in Table B, Receptor 31 K5 is predicted to experience a traffic noise level of 77 dBA L_{eq}. This noise level is considered a severe traffic noise impact by the California Department of Transportation (the Department) because this noise level exceeds 75 dBA L_{eq}. Table C shows that a 4.3 m (14 ft) or 4.9 m (16 ft) high soundwall would reduce traffic noise level by 5 dBA or more, as required to be feasible. However, as the residence represented by Receptor 31 K5 has access onto Ortega Highway, SW-10 would not be effective with a break in the wall to accommodate the driveway. In addition, the cost to relocate underground utilities for the construction of SW-10 would not be considered practical even if the soundwall is feasible. **INTERIOR NOISE ABATMENT SHALL BE OFFERED TO THE PROPERTY OWNER OF RECEPTOR 31 K5.** If interior noise abatement is provided, an agreement must be entered into with the owner of the subject property that specifies that the Department is not responsible for any future cost of operating or maintaining the noise abatement measure.

It should be noted that soundwalls should not exceed 4.3 m (14 ft) in height (measured from the pavement surface at the face of the safety-shape barrier) when located 4.5 m (15 ft) or less from the edge of the traveled way, and should not exceed 4.9 m (16 ft) in height above the ground line when located more than 4.5 m (15 ft) from the traveled way.

Based on this addendum and the guidelines in the Caltrans Traffic Noise Analysis Protocol, noise abatement measures in the form of SW-2 and SW-3 (see the maximum height limitations discussed above) will be considered for the proposed project. Table G summarizes the feasible and reasonable soundwalls evaluated. It should be noted that the soundwalls in this report are not a commitment for noise abatement and they are only recommended for consideration. The following are the recommendations for the proposed soundwalls:

- Both SW-2 and SW-3 are proposed to be constructed along the existing right-of-way.
- The proposed height will provide the maximum benefit of noise reduction for the surrounding residences. Design Branch has to determine whether such wall height is reasonable or not by comparing the final revised estimate project cost of each soundwall to the reasonable allowance listed in Table F. The existing cost estimates were provided by the design engineer and may change in the future; therefore, the revised cost estimate must be used for comparison of whether the wall is reasonable. If the wall is not reasonable, the next lower height should be considered.
- The recommendations of Chapter 11 of the Highway Design Manual for Highway Traffic Noise Abatement must be incorporated into the design of SW-2 and SW-3.
- Top-of-the-wall elevations were calculated based on the data provided by the Design Branch. The design engineer should study the base and the top of the wall elevations to make sure they are consistent with the actual design topography. If the actual top of the wall elevations vary by more than 30 centimeters (cm) (1 ft) from those shown in this report, then this Branch should be notified to make appropriate changes. These elevations should be used to design the top of the walls for the appropriate wall heights selected.
- The final decision concerning the soundwalls will be made upon completion of the project design and public involvement process.
- Based on the Traffic Noise Analysis Protocol, “Noise abatement will not be provided if 50 percent or more of the affected residents do not want it.”

Table G: Preliminary Feasible and Reasonable Soundwalls

Soundwall No.	Land Use	Highway Side	Height m (ft)	Beginning and Ending Top of Wall Elevation (feet)		Beginning and Ending Station Number[1]	
				Begin	End	Begin	End
With Wrap-Around Wall[2]							
SW-2	SFR	South	3.7 (12)	161.3	151.4	24+65	26+86
	SFR	South	4.3 (14)	163.3	153.4		
	SFR	South	4.9 (16)	165.3	155.4		
SW-3[3]	SFR	South	4.3(14)/4.9(16)	158.4(160.4)/ 167.3(169.3)	167.3(169.3)/ 178(180)	27+06/ 28+43[4]	28+43[4]/ 30+76.5
Without Wrap-Around Wall[5]							
SW-2	SFR	South	3.05 (10)	159.3	155.4	24+65	26+78
	SFR	South	3.7 (12)	161.3	157.4		
	SFR	South	4.3 (14)	163.3	159.4		
	SFR	South	4.9 (16)	165.3	161.4		
SW-3[6]	SFR	South	4.3(14)/4.9(16)	160(162)/ 167.3(169.3)	167.3(169.3)/ 178(180)	27+12/ 28+43[4]	28+43[4]/ 30+76.5

Source: LSA Associates, Inc., June 2008.

1 The station numbers are based on the Department station designation numbering in metric units, as shown on the figures.

2 With wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

3 With wrap-around scenario for SW-3 from station number 27+06 to 28+43 is less than 4.5 m (15 ft) from the nearest travel lane and therefore the maximum height is 4.3 m (14 ft).

4 This station number is based on current design plans provided by the Department District 12 Design Branch.

5 Without wrap-around wall for the west end of SW-1, east end of SW-2, and west end of SW-3.

6 Without wrap-around scenario for SW-3 from station number 27+12 to 28+43 is less than 4.5 m (15 ft) from the nearest travel lane and therefore the maximum height is 4.3 m (14 ft).

ft = feet
m = meters

C. PARALLEL BARRIERS

Parallel barrier effects occur when soundwalls or retaining walls are located on both sides of the roadway, reflecting traffic noise back and forth across the roadway multiple times and building up a reverberant sound field between them. This reverberation increases noise levels at nearby receptors on both sides of the roadway, compared to what would exist without the opposite-side barrier. However, these noise level increases would potentially reduce a soundwall's noise attenuation performance. To avoid a reduction in the performance of parallel reflective barriers, the width-to-height ratio of the roadway section to the barriers should be at least 10:1.

Based on the project plans, parallel barriers would be located along Ortega Highway from Palm Hill Drive to Via Errecarte. The project proposes retaining walls on the north side of Ortega Highway and soundwalls (SW-2 and SW-3) on the south side of Ortega Highway. The distances between the retaining walls and soundwalls range from 30.5 m (100 ft) to 54.8 m (125 ft). As the proposed soundwall heights range from 4.3 m (14 ft) to 4.9 m (16 ft), the width-to-height ratio of the roadway section to the barriers would be less than 10:1. Therefore, parallel barriers along Ortega Highway from Palm Hill Drive to Via Errecarte would potentially create noise level increases due to noise reflections and reduce the soundwall's noise attenuation performance. However, as a project feature, the project proposes to construct soundwalls with absorptive material (Sound Fighter Systems) on the interior side facing the traffic to reduce or eliminate noise reflections. The Sound Fighter System is

rated to have a noise reduction coefficient (NRC) of 1.05, which would absorb 100 percent of the reflective noise. Therefore, no measureable noise level increases would occur as a result of parallel barriers, and soundwall noise attenuation performance would not be reduced due to parallel barriers.

D. GROUND-BORNE NOISE AND VIBRATION IMPACTS

Long-Term Operational Impact

Ground-borne vibrations are mostly associated with passenger vehicles and trucks traveling on poor roadway conditions, such as potholes, bumps, expansion joints, or other discontinuities in the road surface. Passenger vehicles and delivery trucks would cause effects such as rattling of windows, and the source is almost always airborne noise. As the project will use new asphalt pavement, there will be no potholes, bumps, expansion joints, or other discontinuities in the road surface that would generate ground-borne vibration or noise impacts from vehicular traffic traveling on Ortega Highway.

Construction Vibration

Construction-related vibration generated by construction equipment can result in varying degrees of ground vibration, depending on the equipment. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings situated on soil near the active construction area respond to these vibrations that range from no perception to low rumbling sounds with perceptible vibrations and slight damage at the highest vibration levels. Typically, construction-related vibrations do not reach vibration levels that would result in damage to nearby structures. However, old and fragile structures would require special consideration to avoid damage.

Table H shows the vibration damage potential threshold criteria. Table H indicates that the vibration damage threshold is 0.3 peak particle velocity (PPV) (inches per second [in/sec]) for old residential structures and 0.5 PPV (in/sec) for new residential structures. Table I shows the vibration annoyance potential criteria. Tables H and I were used to evaluate short-term, construction-related ground-borne vibration.

The proposed project may require the use of a vibratory steel wheel roller during AC placement to compact the AC. Other heavy tracked construction equipment may be required for project construction. As shown in Table J, a typical vibratory steel wheel roller would generate approximately 0.210 PPV (in/sec) when measured at 25 ft. Table J also shows that typical heavy tracked construction equipment would generate approximately 0.003 to 0.089 PPV (in/sec) when measured at 25 ft. In addition, the project proposes to use cast-in-drilled-hole (CIDH) as an alternative to pile drivers. Vibration generated from drilling using the CIDH method would be negligible. Therefore, no ground-borne vibration impacts from CIDH would occur.

Table H: Guideline Vibration Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources[2]
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Caltrans Transportation- and Construction-Induced Vibration Guidance Manual, June 2004.
[1] Transient sources create a single, isolated vibration event, such as blasting or drop balls.
[2] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
in/sec = inches per second
PPV = peak particle velocity

Table I: Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources[1]	Continuous/Frequent Intermittent Sources[2]
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Source: Caltrans Transportation- and Construction-Induced Vibration Guidance Manual, June 2004.
[1] Transient sources create a single, isolated vibration event, such as blasting or drop balls.
[2] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
in/sec = inches per second
PPV = peak particle velocity

Table J: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Crack-and-seat operations	2.4

Sources: Federal Transit Administration 1995 (except Hanson 2001 for vibratory rollers) and Caltrans 2000 for crack-and-seat-operations.
ft = feet
in/sec = inches per second
PPV = peak particle velocity

The closest existing residence is located on the southeast corner of Calle Entradero and Ortega Highway. The distance from the house to the edge of Ortega Highway is approximately 25 ft and would be exposed to a ground-borne vibration level of 0.210 PPV (in/sec) and 0.089 PPV (in/sec) from potential AC placement and heavy tracked construction equipment, respectively. The results of the ground-borne vibration calculation are provided in Appendix F. As shown Table H, this vibration level is well below the impact criteria of 0.3 PPV (in/sec) for older residential structures.

The closest existing historical residence is located on the southwest corner of Via Cristal and Ortega Highway. The distance from the house and garage to the edge of Ortega Highway is approximately 50 ft and 20 ft, respectively. Therefore, the house and garage would be exposed to a ground-borne vibration level of 0.098 PPV (in/sec) and 0.268 PPV (in/sec), respectively. The results of the ground-borne vibration calculation are also provided in Appendix F. Although the City of San Juan Capistrano has designated the house as historic, both the house and the garage are constructed of wood frame structures and may be considered as older residential structures, with a maximum vibration level of 0.3 PPV (in/sec). Therefore, vibration levels generated by AC placement and heavy tracked construction equipment would be below the impact criteria of 0.3 PPV (in/sec) for older residential structures. However, vibration levels generated by AC placement would potentially damage the garage structure. Therefore, no vibratory steel wheel rollers should be used within 50 ft of the existing garage near the existing historical building located on the southwest corner of Via Cristal and Ortega Highway. A pneumatic rubber tire roller is recommended to eliminate ground-borne vibrations and to avoid damage to the garage structure during AC placement. Table I shows that this level of ground-borne vibration is considered strongly perceptible to humans.

E. REFERENCES

Caltrans, 2006. California Department of Transportation. *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects,* August.

Caltrans, 1998. California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol,* October.

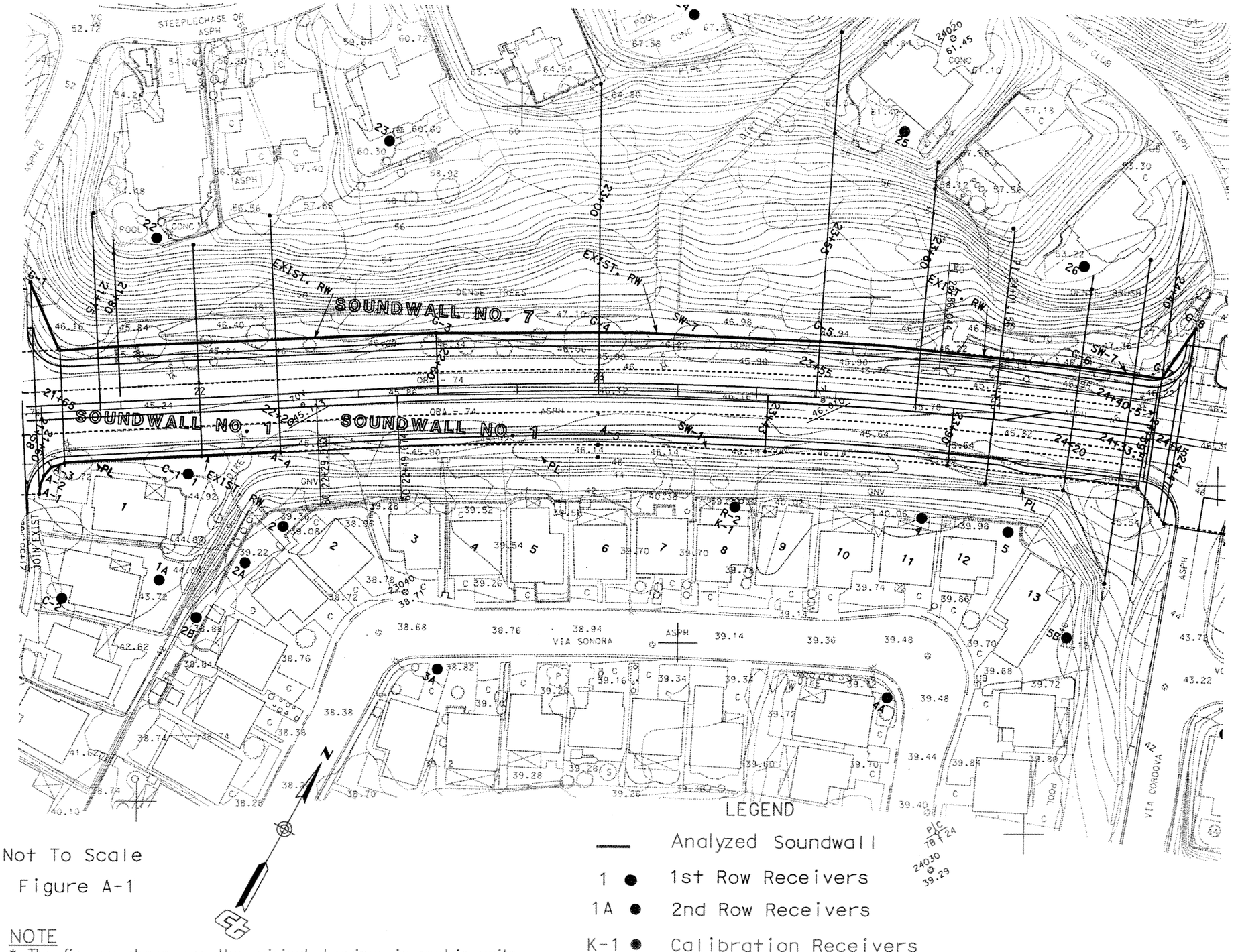
Caltrans, 2002. California Department of Transportation. *SOUND 2000 Version 3.1* (Caltrans traffic noise prediction model).

Caltrans, June 2004, California Department of Transportation, *Transportation- and Construction-Induced Vibration Guidance Manual.*

Caltrans, June 27, 2007, LSA Associates, Inc., *Final Technical Noise Impact Analysis Report for Route 74 (Ortega Highway), from Calle Entradero to 0.43 km East of La Pata Avenue*.

APPENDIX A

SOUNDWALL AND RECEPTOR LOCATIONS



Not To Scale

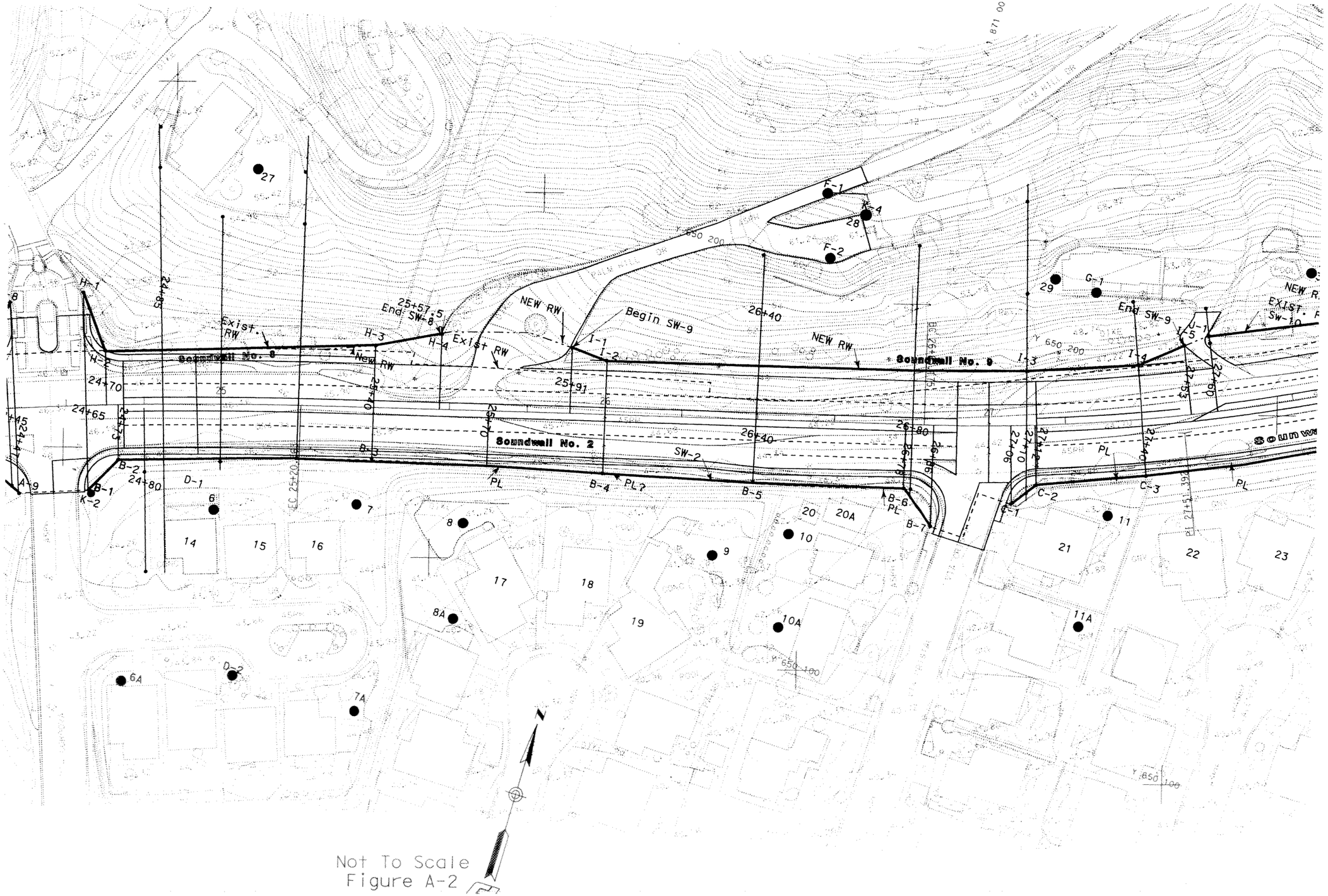
Figure A-1

LEGEND

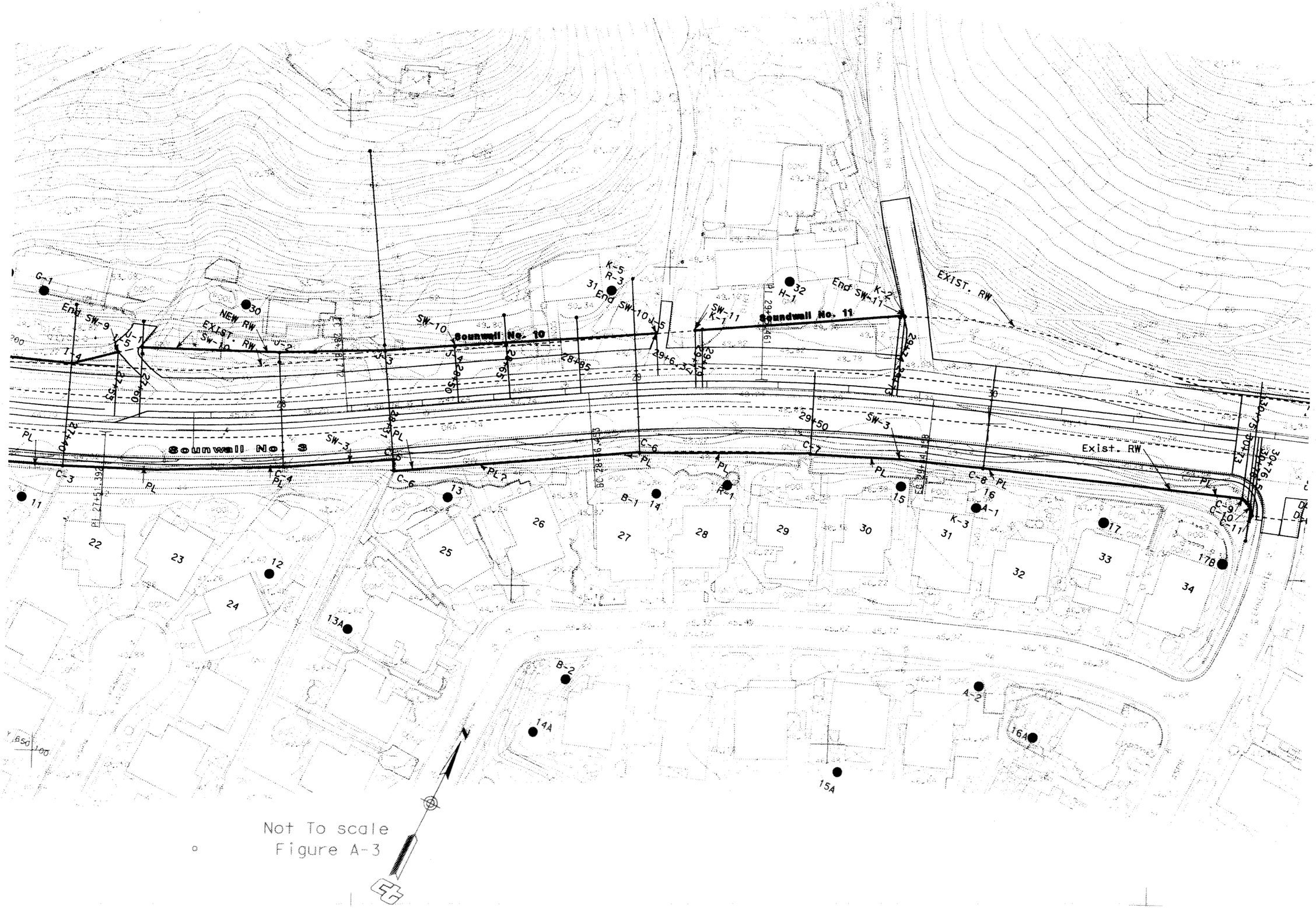
———	Analyzed Soundwall
1 ●	1st Row Receivers
1A ●	2nd Row Receivers
K-1 ●	Calibration Receivers
R-2 ●	Long Term Receptors

NOTE

* The figures shown are the original drawings in metric units.
* Based on the new plans, the maximum wall height for SW-3 is 4.3 m (14 ft) from STA 27+06 to STA 28+43 and 4.9 m (16 ft) from STA 28+43 to STA 30+76.5

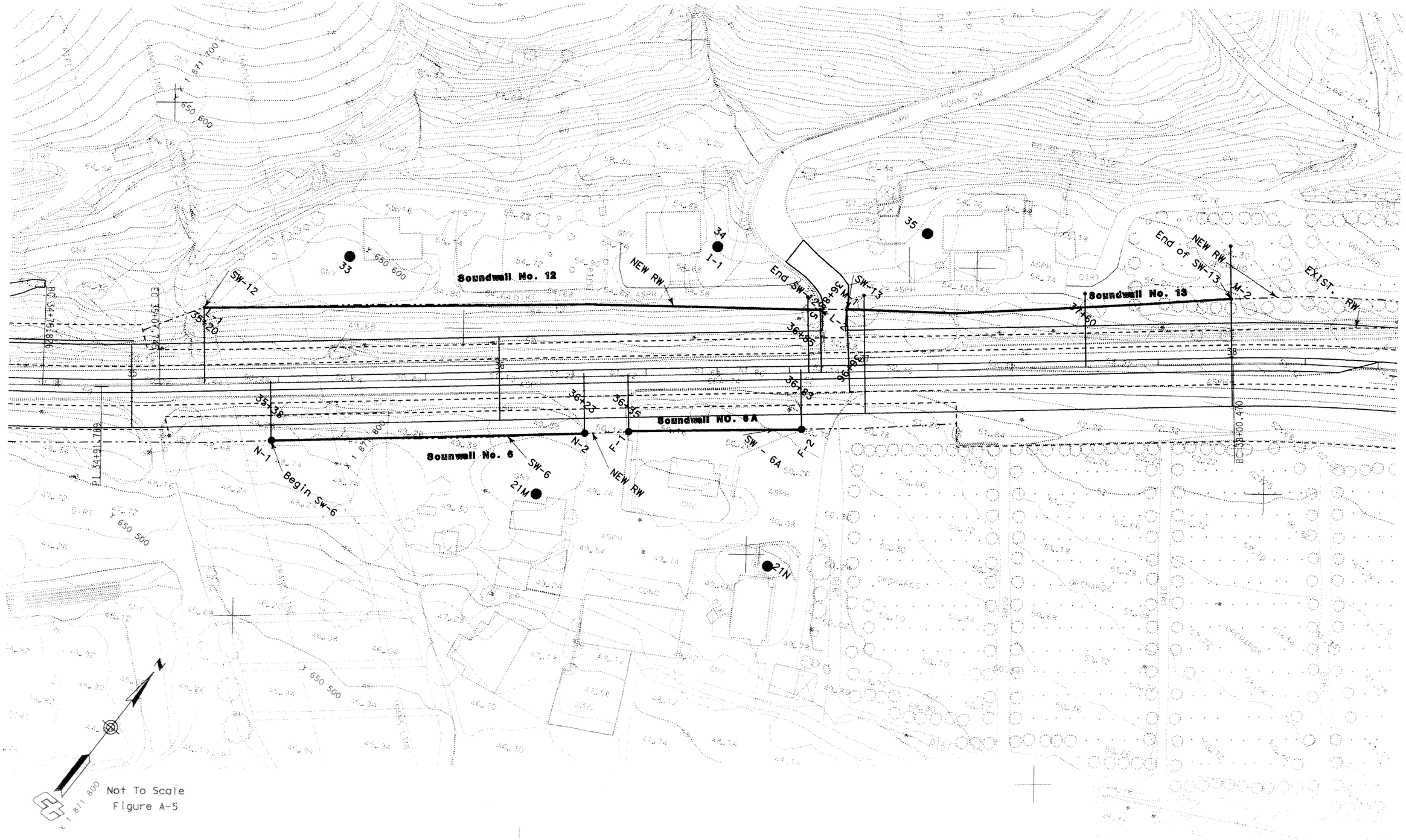


Not To Scale
Figure A-2


Soundwall No. 8
Soundwall No. 10
Soundwall No. 11
EXIST. RW
Exist. RW
NEW RW
End SW-9
End SW-10
End SW-11
SW-3
SW-10
SW-11
29+50
Not To scale
Figure A-3

Not To scale

Figure A-4


Soundwall No. 12
Soundwall No. 13
Soundwall No. 6
Soundwall NO. 6A
SW-12
SW-13
SW-6
SW - 6A
NEW RW
End SW-13
End of SW-13
EXIST. RW
Begin Sw-6
N-1
N-2
F-1
F-2
L-1
L-2
33
34
35
I-1
21M
21N
Not To Scale
Figure A-5

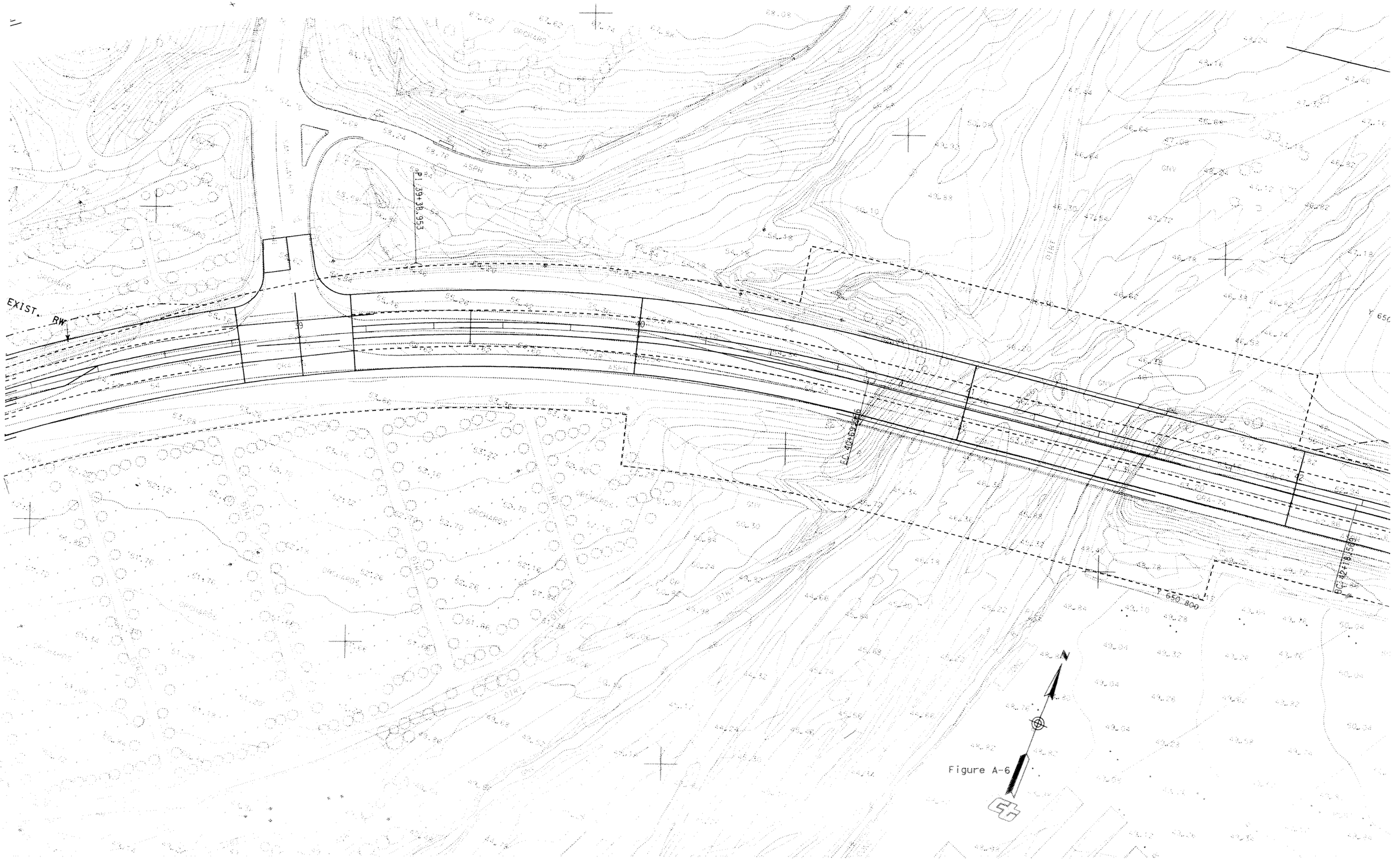


Figure A-6

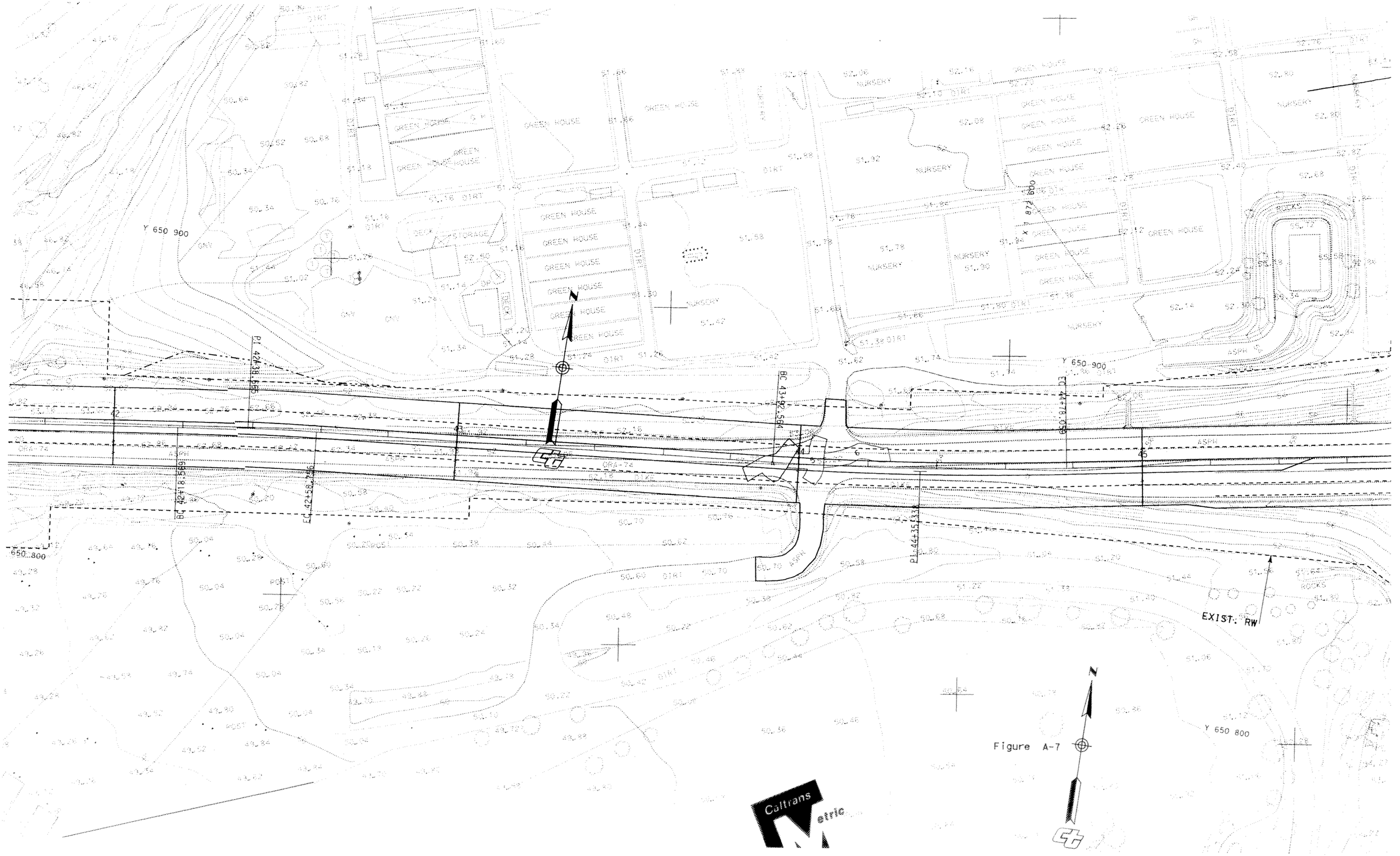

Y 650 900
PI 42+38.56
BC 42+18.56
EC 42+58.56
BC 43+92.56
EC 44+78.09
PI 44+35.33
X 1 872 600
650 300
650 900
EXIST. RW
Y 650 800
N
Caltrans
etric

Figure A-7

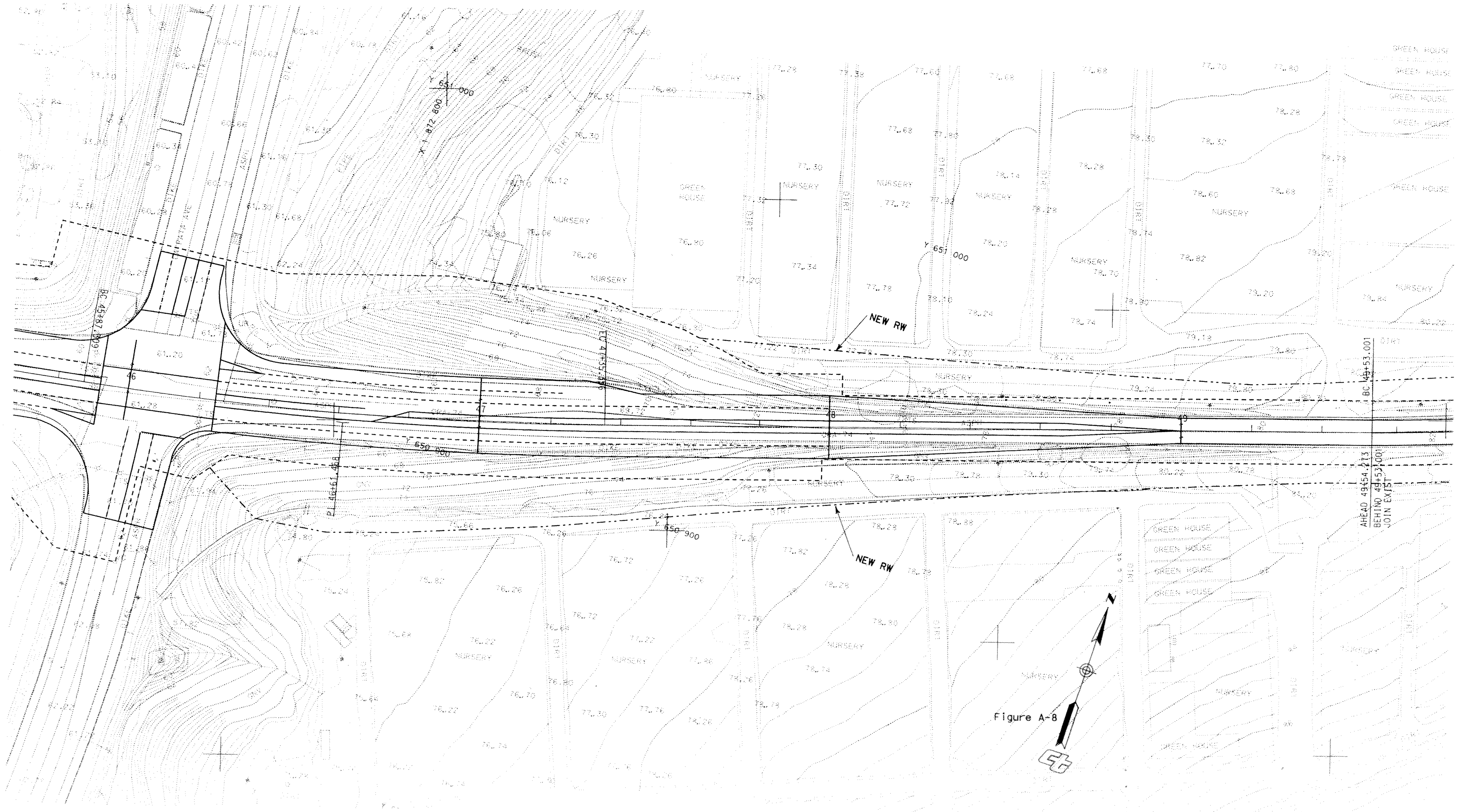

NEW RW
NEW RW
BC 45+87.909
EC 47+35.96
PI 46+61.468
BC 49+53.001
AHEAD 49+54.273
BEHIND 49+53.001
JOIN EXIST
Y 651 000
X 1 872 800
Y 650 900
46
47
48
49
NURSERY
GREEN HOUSE
DIRT
N

Figure A-8

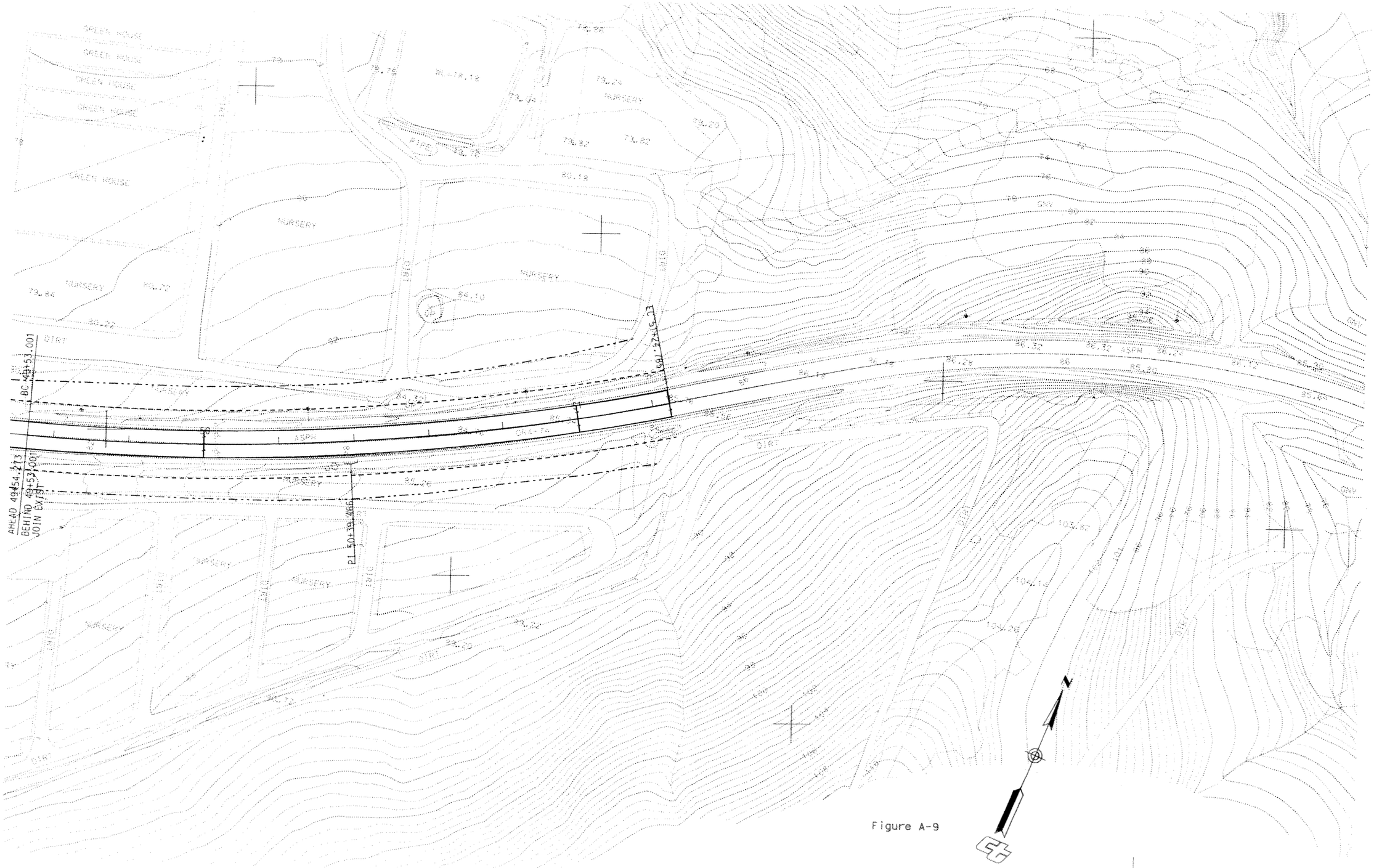

BC 49+53.001
EC 51+28.165
AHEAD 49+54.213
BEHIND 49+53.001
JOIN EXIST
P.I. 50+39.466
DIRT
ASPH
NURSERY
GREEN HOUSE

Figure A-9

Not To Scale

Figure B-1

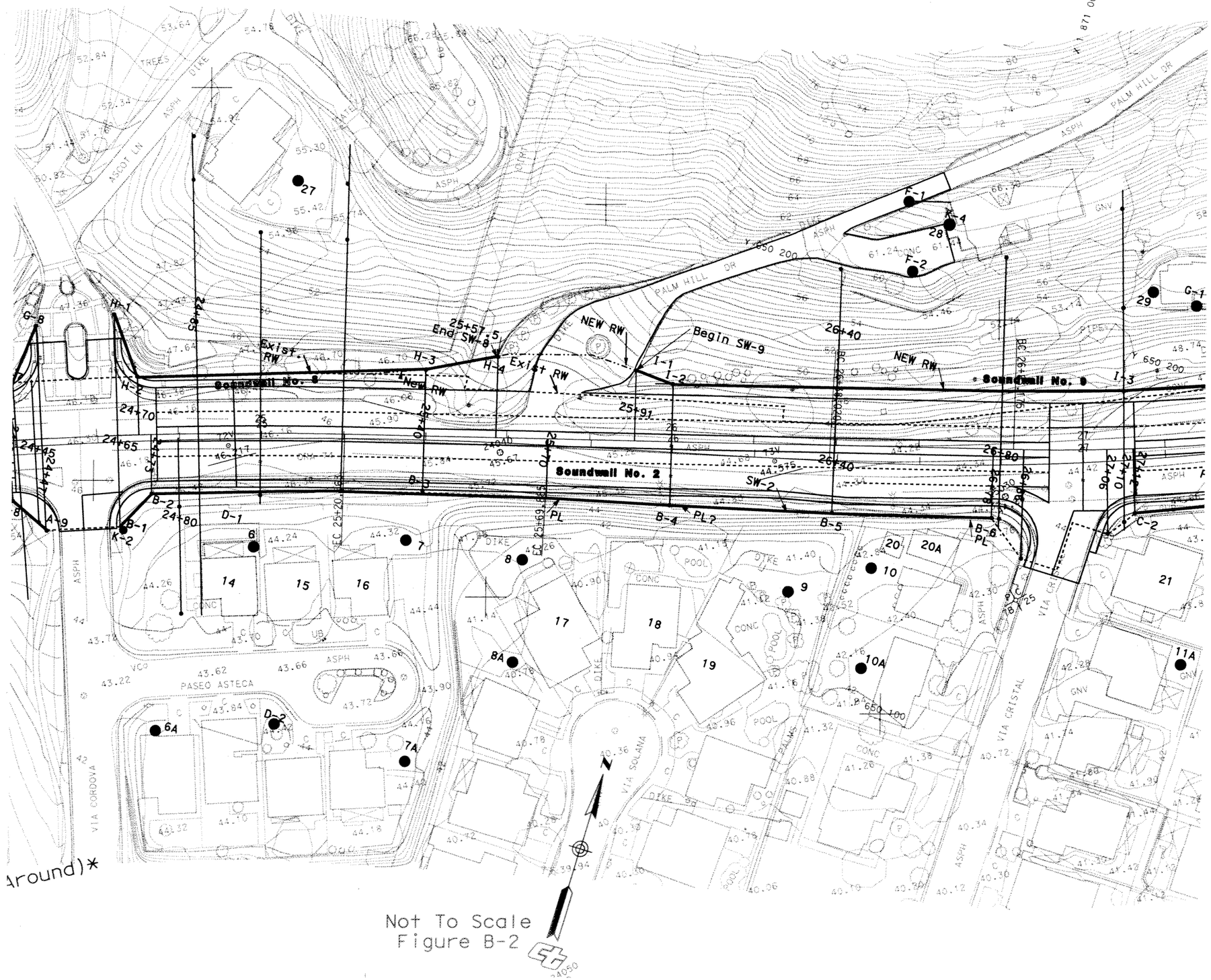
LEGEND

———	Analyzed Soundwall (Without Wrap Around)*
1 ●	1st Row Receivers
1A ●	2nd Row Receivers
K-1 ●	Calibration Receivers
R-2 ●	Long Term Receptors

* West end of SW No.1. East end of SW No. 2 and West end of SW No. 3

NOTE

* The figures shown are the original drawings in metric units.
* Based on the new plans, the maximum wall height for SW-3 is 4.3 m (14 ft) from STA 27+12 to STA 28+43 and 4.9 m (16 ft) from STA 28+43 to STA 30+76.5


Soundwall No. 8
Soundwall No. 2
Soundwall No. 9
Begin SW-9
End SW-8
NEW RW
Exist RW
SW-2
PALM HILL DR
ASCOT LN
PASEO ASTECA
VIA CORDOVA
VIA SOLANA
VIA CRISTAL
ASPH
CONC
DIKE
POOL
TREES
GNV
PL
PL2
EC 25+20
EC 25+59.59
24+70
24+80
25+57.5
25+91
26+40
26+80
27+06
B-1
B-2
B-3
B-4
B-5
B-6
C-1
C-2
D-1
D-2
F-1
F-2
G-1
G-8
H-1
H-2
H-3
H-4
I-1
I-2
I-3
K-1
K-2
A-9
6
6A
7
7A
8
8A
9
10
10A
11A
14
15
16
17
18
19
20
20A
21
27
28
29
Y 650 200
Y 650 100
Not To Scale
Figure B-2

Not To scale
Figure B-3

APPENDIX B

SOUND2000 TRAFFIC NOISE MODEL PRINTOUTS FOR EXISTING CONDITIONS

ORTEGA HWY (EXISTING CONDITION)EB with wrap-around wall
T-ORTEGA HWY, 1
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 2
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 3
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 4
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 5
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 6
 684 , 50 , 58 , 50 , 172 , 50
L-LANE 1 WESTBOUND, 1
N,6136378.7,2132175,143.8,20+00
N,6136717.7,2132382,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132520,148,22+00
N,6137225.4,2132685,151,23+00
N,6137523.5,2132825,150.3,24+00
N,6137834.1,2132935,151.1,25+00
N,6138155.5,2133006,147.8,26+00
N,6138470.3,2133097,145.6,27+00
N,6138769.4,2133229,150.7,28+00
N,6139052.7,2133394,158.2,29+00
N,6139354,2133525,160.8,30+00
N,6139665.6,2133628,162.5,31+00
N,6139974.9,2133739,163.7,32+00
N,6140265.4,2133889,162.1,33+00
6140536.4,2134073,161.8,34+00
L-LANE 2 WESTBOUND, 2
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N,6140796.3,2134272,164.5,35+00
N,6141051.1,2134478,167.5,36+00
N,6141305.1,2134687,171.4,37+00
N,6141558.3,2134895,175.7,38+00
N,6141835.7,2135070,179.6,39+00
N,6142141.3,2135188,179.7,40+00
N,6142465.3,2135231,176.5,41+00
N,6142791.4,2135270,173.7,42+00
N,6143116.7,2135309,170.6,43+00
N,6143443.1,2135347,173.9,44+00
N,6143765.4,2135403,183.7,45+00
6144087.9,2135462,200.5,46+00
L-LANE 3 WESTBOUND, 3
N,6144087.9,2135462,200.5,46+00
N,6144405.7,2135534,220,47+00
N,6144722.1,2135619,241.7,48+00
N,6145034,2135720,259.5,49+00
N,6145347.8,2135828,272.4,50+00
N,6145638.7,2135976,279.9,51+00
6145706,2136020,281.2,51+24
L-LANE 4 EASTBOUND, 4
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132352,144.8,21+20
N,6136834.8,2132412,146.5,21+55
N,6136959.4,2132489,148,22+00
N,6137241.8,2132655,151,23+00
N,6137535.5,2132796,149.9,24+00
N,6137844.5,2132901,151.1,25+00

N,6138161.9,2132983,147.8,26+00
N,6138478,2133072,145.7,27+00
N,6138784.1,2133202,150.9,28+00
N,6139068.1,2133367,158.2,29+00
N,6139363.4,2133498,160.8,30+00
N,6139674.3,2133603,162.5,31+00
N,6139984,2133715,163.7,32+00
N,6140271.9,2133878,162.1,33+00
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N,6141572.5,2134878,175.7,38+00
N,6141846.5,2135050,179.1,39+00
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N,6142466.7,2135219,176.5,41+00
N,6142792.7,2135258,173.9,42+00
N,6143117.7,2135297,170.6,43+00
N,6143444.2,2135335,173.9,44+00
N,6143770.4,2135372,183.7,45+00
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N,6144412.7,2135509,220,47+00
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L-LANE 6 EASTBOUND, 6
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N,6145352.3,2135817,272.4,50+00
N,6145645,2135966,279.9,51+00
6145712.7,2136010,281.2,51.24
B-, 1 , 1 , 0 ,0
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6136876.4,2132409,147.4,147.4,21+65
6136972.5,2132468,148.4,148.4,22+00
6137029,2132502,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757,150.3,150.3,24+00
6137610.4,2132784,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-, 2 , 1 , 0 ,0
6137819.2,2132767,144.4,144.4,24+80
6137792.8,2132848,150.9,150.9,24+80
6137852.2,2132875,150.9,150.9,25+00
6138167.9,2132960,147.6,147.6,26+00
6138422.7,2133024,145.4,145.4,26+80
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6138525.3,2133059,146,146,27+12
6138612.7,2133094,147.5,147.5,27+40
6138884,2133232,153.3,153.3,28+31
6138889,2133224,153.3,153.3,28+31
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6139375.1,2133465,161.4,161.4,30+00
6139606.8,2133543,164,164,30+75
6139621.1,2133512,160.8,160.8,30+76
B-, 4 , 1 , 0 ,0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565,164,164,30+95
6139683.8,2133575,164,164,31+00

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6139869.6,2133641,163.2,163.2,31+60
6139949,2133669,163.1,163.1,31+85
6139976,2133662,163.1,163.1,31+92
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6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133756,163.4,163.4,32+50
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B-BARRIER 1, 6 , 2 , 0 ,0
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6136876.4,2132409,147.4,152.4,21+65
6136972.5,2132468,148.4,152.4,22+00
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B-BARRIER 5, 10 , 2 , 0 ,0
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6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133756,163.4,169.4,32+50
6140248.9,2133821,163.4,169.4,32+85
B-, 11 , 1 , 0 ,0
6136796.3,2132601,177.2,177.2,21+75
6136827.1,2132580,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
```

```
6136925.8,2132670,182.3,182.3,22+20
6137111.5,2132894,211.6,211.6,23+00
6137266.2,2133028,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132972,196.9,196.9,23+80
6137395.9,2132951,187,187,23+80
6137468.7,2132954,187,187,24+00
6137549.9,2132942,173.9,173.9,24+20
B-, 12 , 1 , 0 ,0
6138243.6,2133180,196.9,196.9,B12 P1
6138367.7,2133226,196.9,196.9,B12 P2
6138445,2133290,203.4,203.4,B12 P3
6138468.8,2133214,173.9,173.9,B12 P4
6138556.9,2133233,169,169,B12 P5
6138618.7,2133246,164,164,B12 P6
6138631.2,2133219,155.8,155.8,B12 P7
6138748.1,2133267,155.8,155.8,B12 P8
6138743.4,2133276,157.5,157.5,B12 P9
6138829.2,2133324,157.5,157.5,B12 P10
B-, 13 , 1 , 0 ,0
6137549.9,2132942,173.9,173.9,24+20
6137580.4,2132986,173.9,173.9,24+33
6137573.7,2133055,170.6,170.6,24+40
B-, 14 , 1 , 0 ,0
6137718.2,2133135,177.2,177.2,24+85
6137728,2133102,178.8,178.8,24+85
6137791.6,2133077,178.8,178.8,25+00
6137859.5,2133091,180.4,180.4,25+20
6137847,2133134,183.7,183.7,25+20
B-, 15 , 1 , 0 ,0
6138914.9,2133397,164,164,28+65
6138974.9,2133425,164,164,28+85
6139005.9,2133479,164,164,29+00
B-, 16 , 1 , 0 ,0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133557,161.2,161.2,29+73
B-                          HING, 17 , 1 , 0 ,0
6140809.2,2134361,178,178,35+20
6141228.1,2134703,178.3,178.3,36+85
6141265.6,2134735,178.1,178.1,37+00
6141419.1,2134858,179.6,179.6,37+60
6141495.3,2135061,184.7,184.7,38+00
R, 1 , 67 ,500
6136970,2132449.2,152.4,1
R, 2 , 67 ,500
6136991.5,2132360.3,148.4,1A
R, 3 , 67 ,500
6137060.9,2132449.2,133.7,2
R, 4 , 67 ,500
6137047.8,2132407.7,133.7,2A
R, 5 , 67 ,500
6137229.8,2132406.1,132.4,3A
R, 6 , 67 ,500
6137379.1,2132641.5,137.5,R-2 K-1
R, 7 , 67 ,500
6137518.9,2132707.2,137.5,4
R, 8 , 67 ,500
6137566.6,2132563.2,135.3,4A
R, 9 , 67 ,500
6137587.4,2132731.3,136.2,5
```

```
R, 10 , 67 ,500
6137859.2,2132833.9,150.1,6
R, 11 , 67 ,500
6137826.6,2132671.3,148.8,6A
R, 12 , 67 ,500
6137974.3,2132873.4,150.4,7
R, 13 , 67 ,500
6138025,2132704.6,150.7,7A
R, 14 , 67 ,500
6138067.9,2132884.8,140.4,8
R, 15 , 67 ,500
6138084.3,2132804.3,138.8,8A
R, 16 , 67 ,500
6138278.1,2132920.4,140.3,9
R, 17 , 67 ,500
6138335.8,2132957.1,145.6,10
R, 18 , 67 ,500
6138351.6,2132878.4,143.3,10A
R, 19 , 67 ,500
6138591.3,2133051.6,149.1,11
R, 20 , 67 ,500
6138595.7,2132953.6,143.7,11A
R, 21 , 67 ,500
6138827.7,2133087.7,140.8,12
R, 22 , 67 ,500
6138943.9,2133222.9,152.1,13
R, 23 , 67 ,500
6138915.9,2133073.7,151.4,13A
R, 24 , 67 ,500
6139115.1,2133310.9,155.5,14
R, 25 , 67 ,500
6139110.8,2133065,154.2,14A
R, 26 , 67 ,500
6139170.8,2133347.1,156,R-1
R, 27 , 67 ,500
6139315.3,2133417,157.2,15
R, 28 , 67 ,500
6139380.7,2133157.7,157.5,15A
R, 29 , 67 ,500
6139385.9,2133429.5,157.8,16 K3 A1
R, 30 , 67 ,500
6139527.4,2133264.5,158.5,16A
R, 31 , 67 ,500
6139497.5,2133469.1,159.9,17
R, 32 , 67 ,500
6139760.4,2133498.1,166.9,17A
R, 33 , 67 ,500
6139754.1,2133573.5,162,18
R, 34 , 67 ,500
6139849.1,2133516.9,157.2,18A
R, 35 , 67 ,500
6139916.6,2133630.9,160.1,19
R, 36 , 67 ,500
6140248.5,2133582.6,160.3,19A
R, 37 , 67 ,500
6140101.9,2133708.7,161.3,20
R, 38 , 67 ,500
6140181.3,2133741.7,161.2,21
R, 39 , 67 ,500
6141145.5,2134412.4,167.4,21 M
```

```
R, 40 , 67 ,500
6141351.5,2134492.4,168.2,21N
D, 4.5
ALL,ALL
K,-2
ALL,1,3,6,7,9,10,12
K,-2
ALL,14,16,17,19,21,22,24
K,-2
ALL,26,27,29,31,33,35,37
K,-2
ALL,38,39,40
K,-9
ALL,2,4,5,8,11,13,15
K,-9
ALL,18,20,23,25,28,30
K,-9
ALL,32,34,36
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
ORTEGA HWY (EXISTING CONDITION) EB with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	3.*							21+55	36.3	
31	-	4.*							21+65	2.5	
32	-	5.*							21+65	112.7	
33	-	4.*							22+00	.0	
34	-	4.*							22+00	325.7	
35	-	3.*							23+00	321.3	
36	-	3.*							24+00	65.3	
37	-	5.*							24+20	3.0	
38	-	6.*							24+20	85.5	
39	-	5.*							24+80	85.3	
40	-	4.*							24+80	2.0	

41	-	3.*	24+80	64.9
42	-	3.*	25+00	327.3
43	-	3.*	26+00	262.4
44	-	4.*	27+06	26.4
45	-	4.*	27+12	93.8
46	-	3.*	27+40	1.5
47	-	3.*	27+40	304.6
48	-	3.*	28+31	9.4
49	-	4.*	28+31	2.5
50	-	5.*	28+31	226.0
51	-	5.*	29+00	317.5
52	-	5.*	30+00	244.8
53	-	5.*	30+75	34.2
54	-	5.*	30+95	15.0
55	-	5.*	30+95	18.0
56	-	4.*	31+00	2.5
57	-	3.*	31+00	196.9
58	-	4.*	31+60	3.5
59	-	6.*	31+60	84.3
60	-	6.*	31+85	27.9
61	-	6.*	31+92	89.5
62	-	6.*	32+04	108.2
63	-	6.*	32+15	22.0
64	-	6.*	32+20	101.6
65	-	6.*	32+50	119.7
66	-	0.*	21+75	37.0
67	-	0.*	21+80	66.5
68	-	0.*	22+00	68.5
69	-	0.*	22+20	292.3
70	-	0.*	23+00	204.7
71	-	0.*	23+55	87.2
72	-	0.*	23+55	88.3
73	-	0.*	23+80	24.6
74	-	0.*	23+80	72.6
75	-	0.*	24+00	83.4
76	-	0.*	B12 P1	132.3
77	-	0.*	B12 P2	100.7
78	-	0.*	B12 P3	85.0
79	-	0.*	B12 P4	90.2
80	-	0.*	B12 P5	63.1
81	-	0.*	B12 P6	30.9
82	-	0.*	B12 P7	126.5
83	-	0.*	B12 P8	10.2
84	-	0.*	B12 P9	98.1
85	-	0.*	24+20	53.5
86	-	0.*	24+33	69.4
87	-	0.*	24+85	34.5
88	-	0.*	24+85	68.2
89	-	0.*	25+00	69.4
90	-	0.*	25+20	44.9
91	-	0.*	28+65	66.2
92	-	0.*	28+85	62.3

```
 93      -   0.*                                        29+19      183.2

 94      -   0.*                                        35+20      540.9
 95      -   0.*                                        36+85       49.3
 96      -   0.*                                        37+00      196.7
 97      -   0.*                                        37+60      217.0
 ------------------------------------------------------------------------
----
         0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  1           67.    500.   70.9
  2  1A          67.    500.   58.4
  3  2           67.    500.   61.8
  4  2A          67.    500.   55.9
  5  3A          67.    500.   54.0
  6  R-2 K-1     67.    500.   60.5
  7  4           67.    500.   60.2
  8  4A          67.    500.   54.2
  9  5           67.    500.   59.7
 10  6           67.    500.   68.6
 11  6A          67.    500.   56.7
 12  7           67.    500.   70.6
 13  7A          67.    500.   55.8
 14  8           67.    500.   65.8
 15  8A          67.    500.   57.5
 16  9           67.    500.   67.0
 17  10          67.    500.   69.6
 18  10A         67.    500.   58.4
 19  11          67.    500.   70.2
 20  11A         67.    500.   57.9
 21  12          67.    500.   64.2
 22  13          67.    500.   65.2
 23  13A         67.    500.   56.6
 24  14          67.    500.   64.3
 25  14A         67.    500.   54.0
 26  R-1         67.    500.   63.6
 27  15          67.    500.   62.9
 28  15A         67.    500.   53.1
 29  16 K3 A1    67.    500.   65.1
 30  16A         67.    500.   53.9
 31  17          67.    500.   64.1
 32  17A         67.    500.   59.2
 33  18          67.    500.   66.9
 34  18A         67.    500.   56.6
 35  19          67.    500.   63.6
 36  19A         67.    500.   54.9
 37  20          67.    500.   62.8
 38  21          67.    500.   63.7
 39  21 M        67.    500.   69.5
 40  21N         67.    500.   66.2
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
```

```
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3. 3. 4. 4. 3. 3. 3. 4.
5.
  5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
ORTEGA HWY (EXISTING CONDITION) WB

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	3.*							21+55	36.3	
31	-	4.*							21+65	2.5	
32	-	5.*							21+65	112.7	
33	-	4.*							22+00	.0	
34	-	4.*							22+00	325.7	
35	-	3.*							23+00	321.3	
36	-	3.*							24+00	65.3	
37	-	5.*							24+20	3.0	
38	-	6.*							24+20	85.5	
39	-	5.*							24+80	85.3	
40	-	4.*							24+80	2.0	

41	-	3.*	24+80	64.9
42	-	3.*	25+00	327.3
43	-	3.*	26+00	262.4
44	-	4.*	27+06	26.4
45	-	4.*	27+12	93.8
46	-	3.*	27+40	1.5
47	-	3.*	27+40	304.6
48	-	3.*	28+31	9.4
49	-	4.*	28+31	2.5
50	-	5.*	28+31	226.0
51	-	5.*	29+00	317.5
52	-	5.*	30+00	244.8
53	-	5.*	30+75	34.2
54	-	5.*	30+95	15.0
55	-	5.*	30+95	18.0
56	-	4.*	31+00	2.5
57	-	3.*	31+00	196.9
58	-	4.*	31+60	3.5
59	-	6.*	31+60	84.3
60	-	6.*	31+85	27.9
61	-	6.*	31+92	89.5
62	-	6.*	32+04	108.2
63	-	6.*	32+15	22.0
64	-	6.*	32+20	101.6
65	-	6.*	32+50	119.7
66	-	0.*	21+75	37.0
67	-	0.*	21+80	66.5
68	-	0.*	22+00	68.5
69	-	0.*	22+20	292.3
70	-	0.*	23+00	204.7
71	-	0.*	23+55	87.2
72	-	0.*	23+55	88.3
73	-	0.*	23+80	24.6
74	-	0.*	23+80	72.6
75	-	0.*	24+00	83.4
76	-	0.*	26+40	132.3
77	-	0.*	26+80	100.7
78	-	0.*	27+10	85.0
79	-	0.*	27+10	90.2
80	-	0.*	27+40	63.1
81	-	0.*	27+60	30.9
82	-	0.*	27+60	126.5
83	-	0.*	28+00	10.2
84	-	0.*	28+00	98.1
85	-	0.*	24+20	53.5
86	-	0.*	24+33	69.4
87	-	0.*	24+85	34.5
88	-	0.*	24+85	68.2
89	-	0.*	25+00	69.4
90	-	0.*	25+20	44.9
91	-	0.*	28+65	66.2
92	-	0.*	28+85	62.3

```
 93      -   0.*                                        29+19      183.2

 94      -   0.*                                        35+20      540.9
 95      -   0.*                                        36+85       49.3
 96      -   0.*                                        37+00      196.7
 97      -   0.*                                        37+60      217.0
 ------------------------------------------------------------------------
----
         0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE   LEQ(CAL)
 --------------------------------
  1  22         67.    500.    69.3
  2  23         67.    500.    66.3
  3  24         67.    500.    62.2
  4  25         67.    500.    65.8
  5  26         67.    500.    67.6
  6  27         67.    500.    63.4
  7  28 - K4    67.    500.    67.2
  8  29         67.    500.    69.9
  9  30         67.    500.    71.1
 10  R-3K-5 3   67.    500.    71.4
 11  32         67.    500.    68.5
 12  33         67.    500.    68.0
 13  34         67.    500.    69.1
 14  35         67.    500.    68.6
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3. 3. 4. 4. 3. 3. 3. 4.
5.
  5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
```

```
ORTEGA HWY  (EXISTING CONDITION)  WB
T-ORTEGA HWY, 1
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 2
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 3
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 4
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 5
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 6
 684 , 50 , 58 , 50 , 172 , 50
LANE 1 WESTBOUND, 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137225.4,2132685.2,151,23+00
N,6137523.5,2132824.6,150.3,24+00
N,6137834.1,2132935.3,151.1,25+00
N,6138155.5,2133005.7,147.8,26+00
N,6138470.3,2133097.1,145.6,27+00
N,6138769.4,2133228.6,150.7,28+00
N,6139052.7,2133394.1,158.2,29+00
N,6139354,2133524.8,160.8,30+00
N,6139665.6,2133627.5,162.5,31+00
N,6139974.9,2133739,163.7,32+00
N,6140265.4,2133888.8,162.1,33+00
6140536.4,2134072.5,161.8,34+00
LANE 2 WESTBOUND, 2
N,6140536.4,2134072.5,161.8,34+00
N,6140796.3,2134272.1,164.5,35+00
N,6141051.1,2134478.3,167.5,36+00
N,6141305.1,2134686.6,171.4,37+00
N,6141558.3,2134895,175.7,38+00
N,6141835.7,2135070.3,179.6,39+00
N,6142141.3,2135187.8,179.7,40+00
N,6142465.3,2135230.4,176.5,41+00
N,6142791.4,2135269.5,173.7,42+00
N,6143116.7,2135308.9,170.6,43+00
N,6143443.1,2135347.2,173.9,44+00
N,6143765.4,2135402.4,183.7,45+00
6144087.9,2135462.3,200.5,46+00
LANE 3 WESTBOUND, 3
N,6144087.9,2135462.3,200.5,46+00
N,6144405.7,2135533.6,220,47+00
N,6144722.1,2135618.5,241.7,48+00
N,6145034,2135719.7,259.5,49+00
N,6145347.8,2135828,272.4,50+00
N,6145638.7,2135976.3,279.9,51+00
6145706,2136020.2,281.2,51+24
LANE 4  EASTBOUND, 4
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.6,144.8,21+20
N,6136834.8,2132412,146.5,21+55
N,6136959.4,2132489.3,148,22+00
N,6137241.8,2132655,151,23+00
N,6137535.5,2132796.1,149.9,24+00
N,6137844.5,2132900.6,151.1,25+00
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N,6138161.9,2132982.5,147.8,26+00
N,6138478,2133072.3,145.7,27+00
N,6138784.1,2133201.6,150.9,28+00
N,6139068.1,2133366.6,158.2,29+00
N,6139363.4,2133498.1,160.8,30+00
N,6139674.3,2133602.9,162.5,31+00
N,6139984,2133715.2,163.7,32+00
N,6140271.9,2133878.2,162.1,33+00
6140543.7,2134062.6,161.8,34+00
LANE 5 EASTBOUND, 5
N,6140543.7,2134062.6,161.8,34+00
N,6140804.3,2134262,164.5,35+00
N,6141059.3,2134468.4,167.5,36+00
N,6141313,2134677.1,171.4,37+00
N,6141572.5,2134877.8,175.7,38+00
N,6141846.5,2135049.8,179.1,39+00
N,6142148.1,2135163.1,178.3,40+00
N,6142466.7,2135218.7,176.5,41+00
N,6142792.7,2135258.3,173.9,42+00
N,6143117.7,2135296.6,170.6,43+00
N,6143444.2,2135335,173.9,44+00
N,6143770.4,2135371.8,183.7,45+00
N,6144092.2,2135435.1,199.5,46+00
N,6144412.7,2135509.3,220,47+00
6144726.1,2135608.6,241.2,48+00
LANE 6 EASTBOUND, 6
N,6144726.1,2135608.6,239.8,48+00
N,6145038,2135708.3,259.5,49+00
N,6145352.3,2135816.9,272.4,50+00
N,6145645,2135966,279.9,51+00
6145712.7,2136010.3,281.2,51.24
B-                    HINGE NO.1, 1 , 1 ,0, 0
6136856.1,2132379.1,147.4,147.4,21+55
6136876.4,2132408.5,147.4,147.4,21+65
6136972.5,2132467.5,148.4,148.4,22+00
6137029,2132502.2,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757.3,150.3,150.3,24+00
6137610.4,2132783.5,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-                                    HINGE NO.2, 2 , 1 ,0, 0
6137819.2,2132766.4,144.4,144.4,24+80
6137792.8,2132847.7,150.9,150.9,24+80
6137852.2,2132874.8,150.9,150.9,25+00
6138167.9,2132959.8,147.6,147.6,26+00
6138422.7,2133023.9,145.4,145.4,26+80
B-                                    HINGE NO. 3, 3 , 1 ,0, 0
6138509.3,2133037.9,144.4,144.4,27+06
6138525.3,2133058.8,146,146,27+12
6138612.7,2133093.9,147.5,147.5,27+40
6138884,2133232.3,153.3,153.3,28+31
6138889,2133223.8,153.3,153.3,28+31
6139084.1,2133337.7,159.1,159.1,29+00
6139375.1,2133464.8,161.4,161.4,30+00
6139606.8,2133543.2,164,164,30+75
6139621.1,2133511.5,160.8,160.8,30+76
B-                                    HINGE NO. 4, 4 , 1 ,0, 0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565.1,164,164,30+95
6139683.8,2133575.2,164,164,31+00
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6139869.6,2133640.7,163.2,163.2,31+60
6139949,2133668.7,163.1,163.1,31+85
6139976,2133661.5,163.1,163.1,31+92
6139983.4,2133572.8,157.5,157.5,31+85
B-                                          HINGE NO. 5, 5 , 1 ,0, 0
6140048.1,2133586.8,158.3,158.3,32+04
6140044.8,2133695.3,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133755.6,163.4,163.4,32+50
6140248.9,2133820.4,163.4,163.4,32+85
BARRIER 1, 6, 2 ,0, 0
6136856.1,2132379.1,147.4,149.9,21+55
6136876.4,2132408.5,147.4,149.9,21+65
6136876.4,2132408.5,147.4,152.4,21+65
6136972.5,2132467.5,148.4,152.4,22+00
6136972.5,2132467.5,148.4,152.4,22+00
6137259.2,2132623,151.5,154.5,23+00
6137550.9,2132757.3,150.3,153.3,24+00
6137610.4,2132783.5,150.9,153.9,24+20
6137610.4,2132783.5,150.9,156.9,24+20
6137678.2,2132732,144.4,150.4,24+33
BARRIER 2, 7, 2 ,0, 0
6137819.2,2132766.4,144.4,149.4,24+80
6137792.8,2132847.7,150.9,155.9,24+80
6137792.8,2132847.7,150.9,153.9,24+80
6137852.2,2132874.8,150.9,153.9,25+00
6138167.9,2132959.8,147.6,150.1,26+00
6138422.7,2133023.9,145.4,147.9,26+80
BARRIER 3, 8, 2 ,0, 0
6138509.3,2133037.9,144.4,148.4,27+06
6138525.3,2133058.8,146,150,27+12
6138612.7,2133093.9,147.5,151.5,27+40
6138612.7,2133093.9,147.5,150,27+40
6138884,2133232.3,153.3,155.8,28+31
6138889,2133223.8,153.3,155.8,28+31
6138889,2133223.8,153.3,158.3,28+31
6139084.1,2133337.7,159.1,164.1,29+00
6139375.1,2133464.8,161.4,166.4,30+00
6139606.8,2133543.2,164,169,30+75
6139621.1,2133511.5,160.8,165.8,30+80
BARRIER 4, 9, 2 ,0, 0
6139673.8,2133551,162.4,167.4,30+95
6139668.8,2133565.1,164,169,30+95
6139683.8,2133575.2,164,169,31+00
6139683.8,2133575.2,164,166.5,31+00
6139869.6,2133640.7,163.2,165.7,31+60
6139869.6,2133640.7,163.2,169.2,31+60
6139949,2133668.7,163.1,169.1,31+85
6139976,2133661.5,163.1,169.1,31+92
6139983.4,2133572.8,157.5,163.5,31+85
BARRIER 5, 10, 2 ,0, 0
6140048.1,2133586.8,158.3,164.3,32+04
6140044.8,2133695.3,163.4,169.4,32+15
6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133755.6,163.4,169.4,32+50
6140248.9,2133820.4,163.4,169.4,32+85
B-                                  HINGE NO.6, 11 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
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6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                          HINGE NO. 9, 12 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                              HINGE NO.7, 13 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                          HINGE NO. 8, 14 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                HINGE NO. 10, 15 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                HINGE NO. 11, 16 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                HINGE NO. 12 - BARRIER # 17, 17 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
R, 1, 67, 500
6136851.5,2132607.9,183.8,22
R, 2, 67, 500
6136982.3,2132770,203.2,23
R, 3, 67, 500
6137151.7,2132981.5,226.7,24
R, 4, 67, 500
6137351,2132980.4,206.5,25
R, 5, 67, 500
6137535.2,2132954.8,179.6,26
R, 6, 67, 500
6137808.2,2133124.4,186.6,27
R, 7, 67, 500
6138316.4,2133238.1,216.4,28 - K4
R, 8, 67, 500
6138488,2133232.4,180.5,29
R, 9, 67, 500
6138696.2,2133301.4,172.3,30
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R, 10, 67, 500
6138993,2133460.9,170.2,R-3K-5 31
R, 11, 67, 500
6139137.8,2133541.6,166.4,32
R, 12, 67, 500
6140882,2134476.7,185.4,33
R, 13, 67, 500
6141136,2134687.9,184.7,34
R, 14, 67, 500
6141275.7,2134813.5,184.7,35
D, 4.5
ALL, ALL
K,   0
ALL, 30
K,   0
ALL, 22,23,24,25,26,27,28,29
K,   3
ALL, 31,32,33,34,35
C,C
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ORTEGA HWY  (EXISTING CONDITION)EB
T-ORTEGA HWY, 1
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 2
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 3
 1414 , 50 , 97 , 50 , 106 , 50
T-ORTEGA HWY, 4
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 5
 684 , 50 , 58 , 50 , 172 , 50
T-ORTEGA HWY, 6
 684 , 50 , 58 , 50 , 172 , 50
L-LANE 1 WESTBOUND, 1
N,6136378.7,2132175,143.8,20+00
N,6136717.7,2132382,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132520,148,22+00
N,6137225.4,2132685,151,23+00
N,6137523.5,2132825,150.3,24+00
N,6137834.1,2132935,151.1,25+00
N,6138155.5,2133006,147.8,26+00
N,6138470.3,2133097,145.6,27+00
N,6138769.4,2133229,150.7,28+00
N,6139052.7,2133394,158.2,29+00
N,6139354,2133525,160.8,30+00
N,6139665.6,2133628,162.5,31+00
N,6139974.9,2133739,163.7,32+00
N,6140265.4,2133889,162.1,33+00
6140536.4,2134073,161.8,34+00
L-LANE 2 WESTBOUND, 2
N,6140536.4,2134073,161.8,34+00
N,6140796.3,2134272,164.5,35+00
N,6141051.1,2134478,167.5,36+00
N,6141305.1,2134687,171.4,37+00
N,6141558.3,2134895,175.7,38+00
N,6141835.7,2135070,179.6,39+00
N,6142141.3,2135188,179.7,40+00
N,6142465.3,2135231,176.5,41+00
N,6142791.4,2135270,173.7,42+00
N,6143116.7,2135309,170.6,43+00
N,6143443.1,2135347,173.9,44+00
N,6143765.4,2135403,183.7,45+00
6144087.9,2135462,200.5,46+00
L-LANE 3 WESTBOUND, 3
N,6144087.9,2135462,200.5,46+00
N,6144405.7,2135534,220,47+00
N,6144722.1,2135619,241.7,48+00
N,6145034,2135720,259.5,49+00
N,6145347.8,2135828,272.4,50+00
N,6145638.7,2135976,279.9,51+00
6145706,2136020,281.2,51+24
L-LANE 4  EASTBOUND, 4
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132352,144.8,21+20
N,6136834.8,2132412,146.5,21+55
N,6136959.4,2132489,148,22+00
N,6137241.8,2132655,151,23+00
N,6137535.5,2132796,149.9,24+00
N,6137844.5,2132901,151.1,25+00
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without wrap-around wall

N,6138161.9,2132983,147.8,26+00
N,6138478,2133072,145.7,27+00
N,6138784.1,2133202,150.9,28+00
N,6139068.1,2133367,158.2,29+00
N,6139363.4,2133498,160.8,30+00
N,6139674.3,2133603,162.5,31+00
N,6139984,2133715,163.7,32+00
N,6140271.9,2133878,162.1,33+00
6140543.7,2134063,161.8,34+00
L-LANE 5 EASTBOUND, 5
N,6140543.7,2134063,161.8,34+00
N,6140804.3,2134262,164.5,35+00
N,6141059.3,2134469,167.5,36+00
N,6141313,2134677,171.4,37+00
N,6141572.5,2134878,175.7,38+00
N,6141846.5,2135050,179.1,39+00
N,6142148.1,2135163,178.3,40+00
N,6142466.7,2135219,176.5,41+00
N,6142792.7,2135258,173.9,42+00
N,6143117.7,2135297,170.6,43+00
N,6143444.2,2135335,173.9,44+00
N,6143770.4,2135372,183.7,45+00
N,6144092.2,2135435,199.5,46+00
N,6144412.7,2135509,220,47+00
6144726.1,2135609,241.2,48+00
L-LANE 6 EASTBOUND, 6
N,6144726.1,2135609,239.8,48+00
N,6145038,2135708,259.5,49+00
N,6145352.3,2135817,272.4,50+00
N,6145645,2135966,279.9,51+00
6145712.7,2136010,281.2,51.24
B-, 1 , 1 , 0 ,0
6136856.1,2132379,147.4,147.4,21+55
6136876.4,2132409,147.4,147.4,21+65
6136972.5,2132468,148.4,148.4,22+00
6137029,2132502,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757,150.3,150.3,24+00
6137610.4,2132784,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-, 2 , 1 , 0 ,0
6137819.2,2132767,144.4,144.4,24+80
6137792.8,2132848,150.9,150.9,24+80
6137852.2,2132875,150.9,150.9,25+00
6138167.9,2132960,147.6,147.6,26+00
6138422.7,2133024,145.4,145.4,26+80
B-, 3 , 1 , 0 ,0
6138509.3,2133038,144.4,144.4,27+06
6138525.3,2133059,146,146,27+12
6138612.7,2133094,147.5,147.5,27+40
6138884,2133232,153.3,153.3,28+31
6138889,2133224,153.3,153.3,28+31
6139084.1,2133338,159.1,159.1,29+00
6139375.1,2133465,161.4,161.4,30+00
6139606.8,2133543,164,164,30+75
6139621.1,2133512,160.8,160.8,30+76
B-, 4 , 1 , 0 ,0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565,164,164,30+95
6139683.8,2133575,164,164,31+00

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6139869.6,2133641,163.2,163.2,31+60
6139949,2133669,163.1,163.1,31+85
6139976,2133662,163.1,163.1,31+92
6139983.4,2133573,157.5,157.5,31+85
B-, 5 , 1 , 0 ,0
6140048.1,2133587,158.3,158.3,32+04
6140044.8,2133695,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133756,163.4,163.4,32+50
6140248.9,2133821,163.4,163.4,32+85
B-BARRIER 1, 6 , 2 , 0 ,0
6136856.1,2132379,147.4,149.9,21+55
6136876.4,2132409,147.4,149.9,21+65
6136876.4,2132409,147.4,152.4,21+65
6136972.5,2132468,148.4,152.4,22+00
6136972.5,2132468,148.4,152.4,22+00
6137259.2,2132623,151.5,154.5,23+00
6137550.9,2132757,150.3,153.3,24+00
6137610.4,2132784,150.9,153.9,24+20
6137610.4,2132784,150.9,156.9,24+20
6137678.2,2132732,144.4,150.4,24+33
B-BARRIER 2, 7 , 2 , 0 ,0
6137819.2,2132767,144.4,149.4,24+80
6137792.8,2132848,150.9,155.9,24+80
6137792.8,2132848,150.9,153.9,24+80
6137852.2,2132875,150.9,153.9,25+00
6138167.9,2132960,147.6,150.1,26+00
6138422.7,2133024,145.4,147.9,26+80
B-BARRIER 3, 8 , 2 , 0 ,0
6138509.3,2133038,144.4,148.4,27+06
6138525.3,2133059,146,150,27+12
6138612.7,2133094,147.5,151.5,27+40
6138612.7,2133094,147.5,150,27+40
6138884,2133232,153.3,155.8,28+31
6138889,2133224,153.3,155.8,28+31
6138889,2133224,153.3,158.3,28+31
6139084.1,2133338,159.1,164.1,29+00
6139375.1,2133465,161.4,166.4,30+00
6139606.8,2133543,164,169,30+75
6139621.1,2133512,160.8,165.8,30+80
B-BARRIER 4, 9 , 2 , 0 ,0
6139673.8,2133551,162.4,167.4,30+95
6139668.8,2133565,164,169,30+95
6139683.8,2133575,164,169,31+00
6139683.8,2133575,164,166.5,31+00
6139869.6,2133641,163.2,165.7,31+60
6139869.6,2133641,163.2,169.2,31+60
6139949,2133669,163.1,169.1,31+85
6139976,2133662,163.1,169.1,31+92
6139983.4,2133573,157.5,163.5,31+85
B-BARRIER 5, 10 , 2 , 0 ,0
6140048.1,2133587,158.3,164.3,32+04
6140044.8,2133695,163.4,169.4,32+15
6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133756,163.4,169.4,32+50
6140248.9,2133821,163.4,169.4,32+85
B-, 11 , 1 , 0 ,0
6136796.3,2132601,177.2,177.2,21+75
6136827.1,2132580,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
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```
6136925.8,2132670,182.3,182.3,22+20
6137111.5,2132894,211.6,211.6,23+00
6137266.2,2133028,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132972,196.9,196.9,23+80
6137395.9,2132951,187,187,23+80
6137468.7,2132954,187,187,24+00
6137549.9,2132942,173.9,173.9,24+20
B-, 12 , 1 , 0 ,0
6138243.6,2133180,196.9,196.9,B12 P1
6138367.7,2133226,196.9,196.9,B12 P2
6138445,2133290,203.4,203.4,B12 P3
6138468.8,2133214,173.9,173.9,B12 P4
6138556.9,2133233,169,169,B12 P5
6138618.7,2133246,164,164,B12 P6
6138631.2,2133219,155.8,155.8,B12 P7
6138748.1,2133267,155.8,155.8,B12 P8
6138743.4,2133276,157.5,157.5,B12 P9
6138829.2,2133324,157.5,157.5,B12 P10
B-, 13 , 1 , 0 ,0
6137549.9,2132942,173.9,173.9,24+20
6137580.4,2132986,173.9,173.9,24+33
6137573.7,2133055,170.6,170.6,24+40
B-, 14 , 1 , 0 ,0
6137718.2,2133135,177.2,177.2,24+85
6137728,2133102,178.8,178.8,24+85
6137791.6,2133077,178.8,178.8,25+00
6137859.5,2133091,180.4,180.4,25+20
6137847,2133134,183.7,183.7,25+20
B-, 15 , 1 , 0 ,0
6138914.9,2133397,164,164,28+65
6138974.9,2133425,164,164,28+85
6139005.9,2133479,164,164,29+00
B-, 16 , 1 , 0 ,0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133557,161.2,161.2,29+73
B-                          HING, 17 , 1 , 0 ,0
6140809.2,2134361,178,178,35+20
6141228.1,2134703,178.3,178.3,36+85
6141265.6,2134735,178.1,178.1,37+00
6141419.1,2134858,179.6,179.6,37+60
6141495.3,2135061,184.7,184.7,38+00
R, 1 , 67 ,500
6139611.9,2133483.2,160.2,17B
R, 2 , 67 ,500
6137033.8,2132347.8,132.6,2B
R, 3 , 67 ,500
6137672.9,2132677.8,136.6,5B
D, 4.5
ALL,ALL
K,-2
ALL,1,3
K,-9
ALL,2
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
ORTEGA HWY (EXISTING CONDITION) EB without wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	3.*							21+55	36.3	
31	-	4.*							21+65	2.5	
32	-	5.*							21+65	112.7	
33	-	4.*							22+00	.0	
34	-	4.*							22+00	325.7	
35	-	3.*							23+00	321.3	
36	-	3.*							24+00	65.3	
37	-	5.*							24+20	3.0	
38	-	6.*							24+20	85.5	
39	-	5.*							24+80	85.3	
40	-	4.*							24+80	2.0	

41	-	3.*	24+80	64.9
42	-	3.*	25+00	327.3
43	-	3.*	26+00	262.4
44	-	4.*	27+06	26.4
45	-	4.*	27+12	93.8
46	-	3.*	27+40	1.5
47	-	3.*	27+40	304.6
48	-	3.*	28+31	9.4
49	-	4.*	28+31	2.5
50	-	5.*	28+31	226.0
51	-	5.*	29+00	317.5
52	-	5.*	30+00	244.8
53	-	5.*	30+75	34.2
54	-	5.*	30+95	15.0
55	-	5.*	30+95	18.0
56	-	4.*	31+00	2.5
57	-	3.*	31+00	196.9
58	-	4.*	31+60	3.5
59	-	6.*	31+60	84.3
60	-	6.*	31+85	27.9
61	-	6.*	31+92	89.5
62	-	6.*	32+04	108.2
63	-	6.*	32+15	22.0
64	-	6.*	32+20	101.6
65	-	6.*	32+50	119.7
66	-	0.*	21+75	37.0
67	-	0.*	21+80	66.5
68	-	0.*	22+00	68.5
69	-	0.*	22+20	292.3
70	-	0.*	23+00	204.7
71	-	0.*	23+55	87.2
72	-	0.*	23+55	88.3
73	-	0.*	23+80	24.6
74	-	0.*	23+80	72.6
75	-	0.*	24+00	83.4
76	-	0.*	B12 P1	132.3
77	-	0.*	B12 P2	100.7
78	-	0.*	B12 P3	85.0
79	-	0.*	B12 P4	90.2
80	-	0.*	B12 P5	63.1
81	-	0.*	B12 P6	30.9
82	-	0.*	B12 P7	126.5
83	-	0.*	B12 P8	10.2
84	-	0.*	B12 P9	98.1
85	-	0.*	24+20	53.5
86	-	0.*	24+33	69.4
87	-	0.*	24+85	34.5
88	-	0.*	24+85	68.2
89	-	0.*	25+00	69.4
90	-	0.*	25+20	44.9
91	-	0.*	28+65	66.2
92	-	0.*	28+85	62.3

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 93      -    0.*                                        29+19       183.2

 94      -    0.*                                        35+20       540.9
 95      -    0.*                                        36+85        49.3
 96      -    0.*                                        37+00       196.7
 97      -    0.*                                        37+60       217.0
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE    LEQ(CAL)
 --------------------------------
  1  17B        67.     500.    65.2
  2  2B         67.     500.    55.4
  3  5B         67.     500.    62.7
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3. 3. 4. 4. 3. 3. 3. 4.
5.
  5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
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APPENDIX C

SOUND2000 TRAFFIC NOISE MODEL PRINTOUTS FOR FUTURE 2035 CONDITIONS

FUTURE WITH NO MITIGATION EASTBOUND With wrap-around wall (Prt.1)
T-ORTEGA HWY, 1
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
 942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
 942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.7,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00

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LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                                HINGE NO.1 EASTBOUND, 1 , 1 ,0, 0
6136856.1,2132379.1,147.4,147.4,21+55
6136876.4,2132408.5,147.4,147.4,21+65
6136972.5,2132467.5,148.4,148.4,22+00
6137029,2132502.2,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757.3,150.3,150.3,24+00
6137610.4,2132783.5,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-                                HINGE NO. 2 EASTBOUND, 2 , 1 ,0, 0
6137819.2,2132766.4,144.4,144.4,24+80
6137792.8,2132847.7,150.9,150.9,24+80
6137852.2,2132874.8,150.9,150.9,25+00
6138167.9,2132959.8,147.6,147.6,26+00
6138422.7,2133023.9,145.4,145.4,26+80
B-                                HINGE NO. 3 EASTBOUND, 3 , 1 ,0, 0
6138509.3,2133037.9,144.4,144.4,27+06
6138525.3,2133058.8,146,146,27+12
6138612.7,2133093.9,147.5,147.5,27+40
6138884,2133232.3,153.3,153.3,28+31
6138889,2133223.8,153.3,153.3,28+31
6139084.1,2133337.7,159.1,159.1,29+00
6139375.1,2133464.8,161.4,161.4,30+00
6139606.8,2133543.2,164,164,30+75
6139621.1,2133511.5,160.8,160.8,30+76
B-                                HINGE NO. 4, 4 , 1 ,0, 0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565.1,164,164,30+95
6139683.8,2133575.2,164,164,31+00
6139869.6,2133640.7,163.2,163.2,31+60
6139949,2133668.7,163.1,163.1,31+85
6139976,2133661.5,163.1,163.1,31+92
6139983.4,2133572.8,157.5,157.5,31+85
B-                                HINGE NO. 5 EASTBOUND, 5 , 2 ,0, 0
6140048.1,2133586.8,158.3,158.3,32+04
6140044.8,2133695.3,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133755.6,163.4,163.4,32+50
6140248.9,2133820.4,163.4,163.4,32+85
B-                             HING NO.6, 6 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
```

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6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                              HINGE NO. 7, 7 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                              HINGE NO. 8, 8 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                              HINGE NO. 9, 9 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                              HINGE NO.10, 10 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                              HINGE NO. 11, 11 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                              HINGE NO.12, 12 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO.1, 13, 2 ,0, 0
6136856.1,2132379.1,147.4,149.9,21+55
6136876.4,2132408.5,147.4,149.9,21+65
6136876.4,2132408.5,147.4,152.4,21+65
6136972.5,2132467.5,148.4,152.4,22+00
6136972.5,2132467.5,148.4,152.4,22+00
6137259.2,2132623,151.5,154.5,23+00
6137550.9,2132757.3,150.3,153.3,24+00
6137610.4,2132783.5,150.9,153.9,24+20
6137610.4,2132783.5,150.9,156.9,24+20
6137678.2,2132732,144.4,150.4,24+33
BARRIER NO.2, 14, 2 ,0, 0
6137819.2,2132766.4,144.4,149.4,24+80
6137792.8,2132847.7,150.9,155.9,24+80
6137792.8,2132847.7,150.9,153.9,24+80
6137852.2,2132874.8,150.9,153.9,25+00
6138167.9,2132959.8,147.6,150.1,26+00
6138422.7,2133023.9,145.4,147.9,26+80
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BARRIER NO.3, 15, 2 ,0, 0
6138509.3,2133037.9,144.4,148.4,27+06
6138525.3,2133058.8,146,150,27+12
6138612.7,2133093.9,147.5,151.5,27+40
6138612.7,2133093.9,147.5,150,27+40
6138884,2133232.3,153.3,155.8,28+31
6138889,2133223.8,153.3,155.8,28+31
6138889,2133223.8,153.3,158.3,28+31
6139084.1,2133337.7,159.1,164.1,29+00
6139375.1,2133464.8,161.4,166.4,30+00
6139606.8,2133543.2,164,169,30+75
6139621.1,2133511.5,160.8,165.8,30+76
BARRIER NO. 4, 16, 2 ,0, 0
6139673.8,2133551,162.4,167.4,30+95
6139668.8,2133565.1,164,169,30+95
6139683.8,2133575.2,164,169,31+00
6139683.8,2133575.2,164,166.5,31+00
6139869.6,2133640.7,163.2,165.7,31+60
6139869.6,2133640.7,163.2,169.2,31+60
6139949,2133668.7,163.1,169.1,31+85
6139976,2133661.5,163.1,169.1,31+92
6139983.4,2133572.8,157.5,163.5,31+85
BARRIER NO.5, 17, 2 ,0, 0
6140048.1,2133586.8,158.3,164.3,32+04
6140044.8,2133695.3,163.4,169.4,32+15
6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133755.6,163.4,169.4,32+50
6140248.9,2133820.4,163.4,169.4,32+85
R, 1, 67, 500
6136970,2132449.2,152.4,1
R, 2, 67, 500
6136991.5,2132360.3,148.4,1A
R, 3, 67, 500
6137060.9,2132449.2,133.7,2
R, 4, 67, 500
6137047.8,2132407.7,133.7,2A
R, 5, 67, 500
6137229.8,2132406.1,132.4,3A
R, 6, 67, 500
6137379.1,2132641.5,137.5,R-2 K-1
R, 7, 67, 500
6137518.9,2132707.2,137.5,4
R, 8, 67, 500
6137566.6,2132563.2,135.3,4A
R, 9, 67, 500
6137587.4,2132731.3,136.2,5
R, 10, 67, 500
6137859.2,2132833.9,150.1,6
R, 11, 67, 500
6137828.6,2132673.3,149.0,6A
R, 12, 67, 500
6137974.3,2132873.4,150.4,7
R, 13, 67, 500
6138025,2132704.6,150.7,7A
R, 14, 67, 500
6138067.9,2132884.8,140.4,8
R, 15, 67, 500
6138084.3,2132804.3,138.8,8A
R, 16, 67, 500
6138278.1,2132920.4,140.3,9
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R, 17, 67, 500
6138335.8,2132957.1,145.6,10
R, 18, 67, 500
6138351.6,2132878.4,143.3,10A
R, 19, 67, 500
6138591.3,2133051.6,149.1,11
R, 20, 67, 500
6138595.7,2132953.6,143.7,11A
R, 21, 67, 500
6138827.7,2133087.7,140.8,12
R, 22, 67, 500
6138943.9,2133222.9,152.1,13
R, 23, 67, 500
6138915.9,2133073.7,151.4,13A
R, 24, 67, 500
6139115.1,2133310.9,155.5,14
R, 25, 67, 500
6139110.8,2133065,154.2,14A
R, 26, 67, 500
6139170.8,2133347.1,156,R-1
R, 27, 67, 500
6139315.3,2133417,157.2,15
R, 28, 67, 500
6139380.7,2133157.7,157.5,15A
R, 29, 67, 500
6139385.9,2133429.5,157.8,16 K3 A1
R, 30, 67, 500
6139527.4,2133264.5,158.5,16A
R, 31, 67, 500
6139497.5,2133469.1,159.9,17
R, 32, 67, 500
6139760.4,2133498.1,166.9,17A
R, 33, 67, 500
6139754.1,2133573.5,162,18
R, 34, 67, 500
6139849.1,2133516.9,157.2,18A
R, 35, 67, 500
6139916.6,2133630.9,160.1,19
R, 36, 67, 500
6140248.5,2133582.6,160.3,19A
R, 37, 67, 500
6140101.9,2133708.7,161.3,20
R, 38, 67, 500
6140181.3,2133741.7,161.2,21
R, 39, 67, 500
6141145.5,2134412.4,167.4,21 M
R, 40, 67, 500
6141351.5,2134492.4,168.2,21N
D, 4.5
ALL, ALL
K,   -2
ALL, 1,3,6,7,9,10,12
K,   -2
ALL, 14,16,17,19,21,22,24
K,   -2
ALL, 26,27,29,31,33,35,37
K,   -2
ALL, 38,39,40
K,   -9
ALL, 2,4,5,8,11,13,15
```

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K,    -9
ALL,  18,20,23,25,28,30
K,    -9
ALL,  32,34,36
C,C
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SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH NO MITIGATION EASTBOUND with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*	24+33	69.4
42	-	0.*	24+85	34.5
43	-	0.*	24+85	68.2
44	-	0.*	25+00	69.4
45	-	0.*	25+20	44.9
46	-	0.*	26+40	132.3
47	-	0.*	26+80	100.7
48	-	0.*	27+10	85.0
49	-	0.*	27+10	90.2
50	-	0.*	27+40	63.1
51	-	0.*	27+60	30.9
52	-	0.*	27+60	126.5
53	-	0.*	28+00	10.2
54	-	0.*	28+00	98.1
55	-	0.*	28+65	66.2
56	-	0.*	28+85	62.3
57	-	0.*	29+19	183.2
58	-	0.*	35+20	540.9
59	-	0.*	36+85	49.3
60	-	0.*	37+00	196.7
61	-	0.*	37+60	217.0
62	-	3.*	21+55	36.3
63	-	4.*	21+65	2.5
64	-	5.*	21+65	112.7
65	-	4.*	22+00	.0
66	-	4.*	22+00	325.7
67	-	3.*	23+00	321.3
68	-	3.*	24+00	65.3
69	-	5.*	24+20	3.0
70	-	6.*	24+20	85.5
71	-	5.*	24+80	85.3
72	-	4.*	24+80	2.0
73	-	3.*	24+80	64.9
74	-	3.*	25+00	327.3
75	-	3.*	26+00	262.4
76	-	4.*	27+06	26.4
77	-	4.*	27+12	93.8
78	-	3.*	27+40	1.5
79	-	3.*	27+40	304.6
80	-	3.*	28+31	9.4
81	-	4.*	28+31	2.5
82	-	5.*	28+31	226.0
83	-	5.*	29+00	317.5
84	-	5.*	30+00	244.8
85	-	5.*	30+75	34.2
86	-	5.*	30+95	15.0
87	-	5.*	30+95	18.0
88	-	4.*	31+00	2.5
89	-	3.*	31+00	196.9
90	-	4.*	31+60	3.5
91	-	6.*	31+60	84.3

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 92      -    6.*                                        31+85       27.9
 93      -    6.*                                        31+92       89.5

 94      -    6.*                                        32+04      108.2
 95      -    6.*                                        32+15       22.0
 96      -    6.*                                        32+20      101.6
 97      -    6.*                                        32+50      119.7
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         0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  1           67.    500.   72.8
  2  1A          67.    500.   60.3
  3  2           67.    500.   63.7
  4  2A          67.    500.   57.8
  5  3A          67.    500.   55.9
  6  R-2 K-1     67.    500.   62.1
  7  4           67.    500.   61.8
  8  4A          67.    500.   55.9
  9  5           67.    500.   61.3
 10  6           67.    500.   70.1
 11  6A          67.    500.   58.6
 12  7           67.    500.   71.4
 13  7A          67.    500.   57.4
 14  8           67.    500.   65.7
 15  8A          67.    500.   58.7
 16  9           67.    500.   66.0
 17  10          67.    500.   70.1
 18  10A         67.    500.   59.4
 19  11          67.    500.   70.4
 20  11A         67.    500.   59.2
 21  12          67.    500.   65.2
 22  13          67.    500.   66.2
 23  13A         67.    500.   58.2
 24  14          67.    500.   65.5
 25  14A         67.    500.   55.6
 26  R-1         67.    500.   64.8
 27  15          67.    500.   64.2
 28  15A         67.    500.   54.8
 29  16 K3 A1    67.    500.   66.2
 30  16A         67.    500.   55.6
 31  17          67.    500.   65.3
 32  17A         67.    500.   60.5
 33  18          67.    500.   66.9
 34  18A         67.    500.   58.4
 35  19          67.    500.   64.3
 36  19A         67.    500.   56.7
 37  20          67.    500.   64.3
 38  21          67.    500.   65.7
 39  21 M        67.    500.   71.8
 40  21N         67.    500.   68.3
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
```

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   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3.
3.
  4. 4. 3. 3. 3. 4. 5. 5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6.
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FUTURE WITH NO MITIGATION EASTBOUND with wrap-around wall (Prt.2)
T-ORTEGA HWY, 1
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
 942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
 942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.7,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00

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LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                                HINGE NO.1 EASTBOUND, 1 , 1 ,0, 0
6136856.1,2132379.1,147.4,147.4,21+55
6136876.4,2132408.5,147.4,147.4,21+65
6136972.5,2132467.5,148.4,148.4,22+00
6137029,2132502.2,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757.3,150.3,150.3,24+00
6137610.4,2132783.5,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-                                HINGE NO. 2 EASTBOUND, 2 , 1 ,0, 0
6137819.2,2132766.4,144.4,144.4,24+80
6137792.8,2132847.7,150.9,150.9,24+80
6137852.2,2132874.8,150.9,150.9,25+00
6138167.9,2132959.8,147.6,147.6,26+00
6138422.7,2133023.9,145.4,145.4,26+80
B-                                HINGE NO. 3 EASTBOUND, 3 , 1 ,0, 0
6138509.3,2133037.9,144.4,144.4,27+06
6138525.3,2133058.8,146,146,27+12
6138612.7,2133093.9,147.5,147.5,27+40
6138884,2133232.3,153.3,153.3,28+31
6138889,2133223.8,153.3,153.3,28+31
6139084.1,2133337.7,159.1,159.1,29+00
6139375.1,2133464.8,161.4,161.4,30+00
6139606.8,2133543.2,164,164,30+75
6139621.1,2133511.5,160.8,160.8,30+76
B-                                HINGE NO. 4, 4 , 1 ,0, 0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565.1,164,164,30+95
6139683.8,2133575.2,164,164,31+00
6139869.6,2133640.7,163.2,163.2,31+60
6139949,2133668.7,163.1,163.1,31+85
6139976,2133661.5,163.1,163.1,31+92
6139983.4,2133572.8,157.5,157.5,31+85
B-                                HINGE NO. 5 EASTBOUND, 5 , 2 ,0, 0
6140048.1,2133586.8,158.3,158.3,32+04
6140044.8,2133695.3,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133755.6,163.4,163.4,32+50
6140248.9,2133820.4,163.4,163.4,32+85
B-                             HING NO.6, 6 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
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6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                          HINGE NO. 7, 7 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                          HINGE NO. 8, 8 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                          HINGE NO. 9, 9 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                          HINGE NO.10, 10 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                          HINGE NO. 11, 11 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                          HINGE NO.12, 12 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO.1, 13, 2 ,0, 0
6136856.1,2132379.1,147.4,149.9,21+55
6136876.4,2132408.5,147.4,149.9,21+65
6136876.4,2132408.5,147.4,152.4,21+65
6136972.5,2132467.5,148.4,152.4,22+00
6136972.5,2132467.5,148.4,152.4,22+00
6137259.2,2132623,151.5,154.5,23+00
6137550.9,2132757.3,150.3,153.3,24+00
6137610.4,2132783.5,150.9,153.9,24+20
6137610.4,2132783.5,150.9,156.9,24+20
6137678.2,2132732,144.4,150.4,24+33
BARRIER NO.2, 14, 2 ,0, 0
6137819.2,2132766.4,144.4,149.4,24+80
6137792.8,2132847.7,150.9,155.9,24+80
6137792.8,2132847.7,150.9,153.9,24+80
6137852.2,2132874.8,150.9,153.9,25+00
6138167.9,2132959.8,147.6,150.1,26+00
6138422.7,2133023.9,145.4,147.9,26+80
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BARRIER NO.3, 15, 2 ,0, 0
6138509.3,2133037.9,144.4,148.4,27+06
6138525.3,2133058.8,146,150,27+12
6138612.7,2133093.9,147.5,151.5,27+40
6138612.7,2133093.9,147.5,150,27+40
6138884,2133232.3,153.3,155.8,28+31
6138889,2133223.8,153.3,155.8,28+31
6138889,2133223.8,153.3,158.3,28+31
6139084.1,2133337.7,159.1,164.1,29+00
6139375.1,2133464.8,161.4,166.4,30+00
6139606.8,2133543.2,164,169,30+75
6139621.1,2133511.5,160.8,165.8,30+76
BARRIER NO. 4, 16, 2 ,0, 0
6139673.8,2133551,162.4,167.4,30+95
6139668.8,2133565.1,164,169,30+95
6139683.8,2133575.2,164,169,31+00
6139683.8,2133575.2,164,166.5,31+00
6139869.6,2133640.7,163.2,165.7,31+60
6139869.6,2133640.7,163.2,169.2,31+60
6139949,2133668.7,163.1,169.1,31+85
6139976,2133661.5,163.1,169.1,31+92
6139983.4,2133572.8,157.5,163.5,31+85
BARRIER NO.5, 17, 2 ,0, 0
6140048.1,2133586.8,158.3,164.3,32+04
6140044.8,2133695.3,163.4,169.4,32+15
6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133755.6,163.4,169.4,32+50
6140248.9,2133820.4,163.4,169.4,32+85
R, 1 , 67 ,500
6139611.9,2133483.2,160.2,17B
R, 2 , 67 ,500
6137033.8,2132347.8,132.6,2B
R, 3 , 67 ,500
6137672.9,2132677.8,136.6,5B
D, 4.5
ALL,ALL
K,-2
ALL,1,3
K,-9
ALL,2
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH NO MITIGATION EASTBOUND with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*	24+33	69.4
42	-	0.*	24+85	34.5
43	-	0.*	24+85	68.2
44	-	0.*	25+00	69.4
45	-	0.*	25+20	44.9
46	-	0.*	26+40	132.3
47	-	0.*	26+80	100.7
48	-	0.*	27+10	85.0
49	-	0.*	27+10	90.2
50	-	0.*	27+40	63.1
51	-	0.*	27+60	30.9
52	-	0.*	27+60	126.5
53	-	0.*	28+00	10.2
54	-	0.*	28+00	98.1
55	-	0.*	28+65	66.2
56	-	0.*	28+85	62.3
57	-	0.*	29+19	183.2
58	-	0.*	35+20	540.9
59	-	0.*	36+85	49.3
60	-	0.*	37+00	196.7
61	-	0.*	37+60	217.0
62	-	3.*	21+55	36.3
63	-	4.*	21+65	2.5
64	-	5.*	21+65	112.7
65	-	4.*	22+00	.0
66	-	4.*	22+00	325.7
67	-	3.*	23+00	321.3
68	-	3.*	24+00	65.3
69	-	5.*	24+20	3.0
70	-	6.*	24+20	85.5
71	-	5.*	24+80	85.3
72	-	4.*	24+80	2.0
73	-	3.*	24+80	64.9
74	-	3.*	25+00	327.3
75	-	3.*	26+00	262.4
76	-	4.*	27+06	26.4
77	-	4.*	27+12	93.8
78	-	3.*	27+40	1.5
79	-	3.*	27+40	304.6
80	-	3.*	28+31	9.4
81	-	4.*	28+31	2.5
82	-	5.*	28+31	226.0
83	-	5.*	29+00	317.5
84	-	5.*	30+00	244.8
85	-	5.*	30+75	34.2
86	-	5.*	30+95	15.0
87	-	5.*	30+95	18.0
88	-	4.*	31+00	2.5
89	-	3.*	31+00	196.9
90	-	4.*	31+60	3.5
91	-	6.*	31+60	84.3

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 92      -   6.*                                        31+85       27.9
 93      -   6.*                                        31+92       89.5

 94      -   6.*                                        32+04      108.2
 95      -   6.*                                        32+15       22.0
 96      -   6.*                                        32+20      101.6
 97      -   6.*                                        32+50      119.7
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----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B        67.    500.   66.6
  2  2B         67.    500.   57.3
  3  5B         67.    500.   64.5
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3.
3.
  4. 4. 3. 3. 3. 4. 5. 5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6.
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FUTURE WITH NO MITIGATION WESTBOUND without wrap-around wall
T-ORTEGA HWY, 1
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.6,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00

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LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                  HINGE NO.1 EASTBOUND, 1 , 1 ,0, 0
6136856.1,2132379.1,147.4,147.4,21+55
6136876.4,2132408.5,147.4,147.4,21+65
6136972.5,2132467.5,148.4,148.4,22+00
6137029,2132502.2,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757.3,150.3,150.3,24+00
6137610.4,2132783.5,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-                  HINGE NO. 2 EASTBOUND, 2 , 1 ,0, 0
6137819.2,2132766.4,144.4,144.4,24+80
6137792.8,2132847.7,150.9,150.9,24+80
6137852.2,2132874.8,150.9,150.9,25+00
6138167.9,2132959.8,147.6,147.6,26+00
6138422.7,2133023.9,145.4,145.4,26+80
B-                  HINGE NO. 3 EASTBOUND, 3 , 1 ,0, 0
6138509.3,2133037.9,144.4,144.4,27+06
6138525.3,2133058.8,146,146,27+12
6138612.7,2133093.9,147.5,147.5,27+40
6138884,2133232.3,153.3,153.3,28+31
6138889,2133223.8,153.3,153.3,28+31
6139084.1,2133337.7,159.1,159.1,29+00
6139375.1,2133464.8,161.4,161.4,30+00
6139606.8,2133543.2,164,164,30+75
6139621.1,2133511.5,160.8,160.8,30+76
B-                  HINGE NO. 4, 4 , 1 ,0, 0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565.1,164,164,30+95
6139683.8,2133575.2,164,164,31+00
6139869.6,2133640.7,163.2,163.2,31+60
6139949,2133668.7,163.1,163.1,31+85
6139976,2133661.5,163.1,163.1,31+92
6139983.4,2133572.8,157.5,157.5,31+85
B-                  HINGE NO. 5 EASTBOUND, 5 , 2 ,0, 0
6140048.1,2133586.8,158.3,158.3,32+04
6140044.8,2133695.3,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133755.6,163.4,163.4,32+50
6140248.9,2133820.4,163.4,163.4,32+85
B-            HING NO.6, 6 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
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6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-           HINGE NO. 7, 7 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-           HINGE NO. 8, 8 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-           HINGE NO. 9, 9 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-           HINGE NO.10, 10 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-           HINGE NO. 11, 11 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-           HINGE NO.12, 12 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO.1, 13, 2 ,0, 0
6136856.1,2132379.1,147.4,149.9,21+55
6136876.4,2132408.5,147.4,149.9,21+65
6136876.4,2132408.5,147.4,152.4,21+65
6136972.5,2132467.5,148.4,152.4,22+00
6136972.5,2132467.5,148.4,152.4,22+00
6137259.2,2132623,151.5,154.5,23+00
6137550.9,2132757.3,150.3,153.3,24+00
6137610.4,2132783.5,150.9,153.9,24+20
6137610.4,2132783.5,150.9,156.9,24+20
6137678.2,2132732,144.4,150.4,24+33
BARRIER NO.2, 14, 2 ,0, 0
6137819.2,2132766.4,144.4,149.4,24+80
6137792.8,2132847.7,150.9,155.9,24+80
6137792.8,2132847.7,150.9,153.9,24+80
6137852.2,2132874.8,150.9,153.9,25+00
6138167.9,2132959.8,147.6,150.1,26+00
6138422.7,2133023.9,145.4,147.9,26+80
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BARRIER NO.3, 15, 2 ,0, 0
6138509.3,2133037.9,144.4,148.4,27+06
6138525.3,2133058.8,146,150,27+12
6138612.7,2133093.9,147.5,151.5,27+40
6138612.7,2133093.9,147.5,150,27+40
6138884,2133232.3,153.3,155.8,28+31
6138889,2133223.8,153.3,155.8,28+31
6138889,2133223.8,153.3,158.3,28+31
6139084.1,2133337.7,159.1,164.1,29+00
6139375.1,2133464.8,161.4,166.4,30+00
6139606.8,2133543.2,164,169,30+75
6139621.1,2133511.5,160.8,165.8,30+76
BARRIER NO.4, 16, 2 ,0, 0
6139673.8,2133551,162.4,167.4,30+95
6139668.8,2133565.1,164,169,30+95
6139683.8,2133575.2,164,169,31+00
6139683.8,2133575.2,164,166.5,31+00
6139869.6,2133640.7,163.2,165.7,31+60
6139869.6,2133640.7,163.2,169.2,31+60
6139949,2133668.7,163.1,169.1,31+85
6139976,2133661.5,163.1,169.1,31+92
6139983.4,2133572.8,157.5,163.5,31+85
BARRIER NO. 5, 17, 2 ,0, 0
6140048.1,2133586.8,158.3,164.3,32+04
6140044.8,2133695.3,163.4,169.4,32+15
6140056.1,2133714,163.4,169.4,32+20
6140148.6,2133755.6,163.4,169.4,32+50
6140248.9,2133820.4,163.4,169.4,32+85
R, 1, 67, 500
6136851.5,2132607.9,183.8,22
R, 2, 67, 500
6136982.3,2132770,203.2,23
R, 3, 67, 500
6137151.7,2132981.5,226.7,24
R, 4, 67, 500
6137351,2132980.4,206.5,25
R, 5, 67, 500
6137535.2,2132954.8,179.6,26
R, 6, 67, 500
6137808.2,2133124.4,186.6,27
R, 7, 67, 500
6138316.4,2133238.1,216.4,28 - K4
R, 8, 67, 500
6138488,2133232.4,180.5,29
R, 9, 67, 500
6138696.2,2133301.4,172.3,30
R, 10, 67, 500
6138993,2133460.9,170.2,R-3K-5 31
R, 11, 67, 500
6139137.8,2133541.6,166.4,32
R, 12, 67, 500
6140882,2134476.7,185.4,33
R, 13, 67, 500
6141136,2134687.9,184.7,34
R, 14, 67, 500
6141275.7,2134813.5,184.7,35
D, 4.5
ALL, ALL
K,   0
ALL, 9
```

```
K,    0
ALL,  1,2,3,4,5,6,7,8
K,    3
ALL,  10,11,12,13,14
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH NO MITIGATION WESTBOUND

1

BARRIER DATA
****

BAR ELE	0	1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*	24+33	69.4
42	-	0.*	24+85	34.5
43	-	0.*	24+85	68.2
44	-	0.*	25+00	69.4
45	-	0.*	25+20	44.9
46	-	0.*	26+40	132.3
47	-	0.*	26+80	100.7
48	-	0.*	27+10	85.0
49	-	0.*	27+10	90.2
50	-	0.*	27+40	63.1
51	-	0.*	27+60	30.9
52	-	0.*	27+60	126.5
53	-	0.*	28+00	10.2
54	-	0.*	28+00	98.1
55	-	0.*	28+65	66.2
56	-	0.*	28+85	62.3
57	-	0.*	29+19	183.2
58	-	0.*	35+20	540.9
59	-	0.*	36+85	49.3
60	-	0.*	37+00	196.7
61	-	0.*	37+60	217.0
62	-	3.*	21+55	36.3
63	-	4.*	21+65	2.5
64	-	5.*	21+65	112.7
65	-	4.*	22+00	.0
66	-	4.*	22+00	325.7
67	-	3.*	23+00	321.3
68	-	3.*	24+00	65.3
69	-	5.*	24+20	3.0
70	-	6.*	24+20	85.5
71	-	5.*	24+80	85.3
72	-	4.*	24+80	2.0
73	-	3.*	24+80	64.9
74	-	3.*	25+00	327.3
75	-	3.*	26+00	262.4
76	-	4.*	27+06	26.4
77	-	4.*	27+12	93.8
78	-	3.*	27+40	1.5
79	-	3.*	27+40	304.6
80	-	3.*	28+31	9.4
81	-	4.*	28+31	2.5
82	-	5.*	28+31	226.0
83	-	5.*	29+00	317.5
84	-	5.*	30+00	244.8
85	-	5.*	30+75	34.2
86	-	5.*	30+95	15.0
87	-	5.*	30+95	18.0
88	-	4.*	31+00	2.5
89	-	3.*	31+00	196.9
90	-	4.*	31+60	3.5
91	-	6.*	31+60	84.3

```
 92      -   6.*                                        31+85       27.9
 93      -   6.*                                        31+92       89.5

 94      -   6.*                                        32+04      108.2
 95      -   6.*                                        32+15       22.0
 96      -   6.*                                        32+20      101.6
 97      -   6.*                                        32+50      119.7
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 ---------------------------------
  1  22         67.    500.   71.3
  2  23         67.    500.   68.4
  3  24         67.    500.   64.1
  4  25         67.    500.   67.9
  5  26         67.    500.   69.6
  6  27         67.    500.   65.5
  7  28 - K4    67.    500.   69.6
  8  29         67.    500.   72.5
  9  30         67.    500.   73.0
 10  R-3K-5 3   67.    500.   77.1
 11  32         67.    500.   73.8
 12  33         67.    500.   73.0
 13  34         67.    500.   73.6
 14  35         67.    500.   73.5
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 3. 4. 5. 4. 4. 3. 3. 5. 6. 5. 4. 3. 3.
3.
  4. 4. 3. 3. 3. 4. 5. 5. 5. 5. 5. 5. 4. 3. 4. 6. 6. 6. 6. 6. 6. 6.
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APPENDIX D

SOUND2000 TRAFFIC NOISE MODEL PRINTOUTS FOR FUTURE 2035 CONDITIONS WITH SOUNDWALLS

FUTURE WITH MITIGATION (Eastbound) 8 FT. WALL with wrap-around wall (Pt. 1)
T-ORTEGA HWY, 1
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.7,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00

```
LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                        HING NO.6, 1 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                                          HINGE NO. 7, 2 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                                          HINGE NO. 8, 3 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                                          HINGE NO. 9, 4 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                                          HINGE NO.10, 5 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                                          HINGE NO. 11, 6 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                                          HINGE NO.12, 7 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
```

6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO.1 EB 8 FT, 8, 2 ,0, 0
6136870.1,2132375.6,144.4,152.4,21+58
6136866.2,2132391,145.8,153.8,21+60
6136876.4,2132408.5,147.3,155.3,21+65
6137029,2132502.2,149.3,157.3,22+20
6137254.3,2132632,151,159,23+00
6137378.5,2132693.9,151.4,159.4,23+43
6137515.8,2132755.7,150.3,158.3,23+90
6137663.9,2132814.2,151.2,159.2,23+39
6137696.8,2132799.2,149.3,157.3,24+47
BARRIER NO.4 EB 8 FT, 9, 2 ,0, 0
6139668.3,2133553.8,162.4,170.4,30+93
6139668.8,2133565.1,162.4,170.4,30+95
6139683.8,2133575.2,162.4,170.4,31+00
6139869.6,2133640.7,163.2,171.2,31+60
6139949,2133668.7,163.1,171.1,31+85
6139976,2133661.5,163.1,171.1,31+92
BARRIER NO. 3 EB 8 FT, 10, 2 ,0, 0
6138509.3,2133037.5,144.4,152.4,27+06
6138525.3,2133058.8,146,154,27+12
6138612.7,2133093.9,147.5,155.5,27+40
6138794.7,2133181.9,151.1,159.1,28+00
6138889,2133223.8,153.3,161.3,28+31
6139084.1,2133337.7,159.1,167.1,29+00
6139226.6,2133406.9,160.8,168.8,29+50
6139375.1,2133464.8,161.4,169.4,30+00
6139601,2133544.9,164,172,30+73
6139610.8,2133541.6,164,172,30+76
6139616,2133534.9,164,172,30+76.5
BARRIER NO. 5 EB 8FT, 11, 2 ,0, 0
6140044.9,2133687,159.1,167.1,32+13.5
6140044.8,2133695.3,160.8,168.8,32+15
6140056.1,2133714,163.2,171.2,32+20
6140148.6,2133755.6,163.4,171.4,32+50
6140245.4,2133807.1,162.4,170.4,32+82
6140245.9,2133816.4,162.4,170.4,32+84
6140298.5,2133832.9,154,162,33+00
6140341.5,2133859.6,153.5,161.5,33+15
6140380.3,2133885.3,154,162,33+29
BARRIER NO.2 EB 8FT, 12, 2 ,0, 0
6137752.5,2132819.3,149.3,157.3,24+65
6137768.3,2132851.1,152.2,160.2,24+73
6137975.7,2132914.9,150.8,158.8,25+40
6138167.9,2132959.8,147.7,155.7,26+00
6138293.2,2132990.8,145.7,153.7,26+40
6138416.7,2133022.9,145.4,153.4,26+78
6138448.7,2132998.5,139.4,147.4,26+86
BARRIER NO.6 EB 8 FT, 13, 2 ,0, 0
6140930.6,2134304.5,161.2,169.2,35+38
6141146.1,2134482.1,163.7,171.7,36+23
BARRIER NO. 6A, 14, 2 ,0, 0
6141176.2,2134507.3,164.9,172.9,36+35
6141298.4,2134606.9,166.4,174.4,36+53
R, 1, 67, 500
6136970,2132449.2,152.4,1
R, 2, 67, 500
6136991.5,2132360.3,148.4,1A

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R, 3, 67, 500
6137060.9,2132449.2,133.7,2
R, 4, 67, 500
6137047.8,2132407.7,133.7,2A
R, 5, 67, 500
6137229.8,2132406.1,132.4,3A
R, 6, 67, 500
6137379.1,2132641.5,137.5,R-2 K-1
R, 7, 67, 500
6137518.9,2132707.2,137.5,4
R, 8, 67, 500
6137566.6,2132563.2,135.3,4A
R, 9, 67, 500
6137587.4,2132731.3,136.2,5
R, 10, 67, 500
6137859.2,2132833.9,150.1,6
R, 11, 67, 500
6137828.6,2132673.3,149.0,6A
R, 12, 67, 500
6137974.3,2132873.4,150.4,7
R, 13, 67, 500
6138025,2132704.6,150.7,7A
R, 14, 67, 500
6138067.9,2132884.8,140.4,8
R, 15, 67, 500
6138084.3,2132804.3,138.8,8A
R, 16, 67, 500
6138278.1,2132920.4,140.3,9
R, 17, 67, 500
6138335.8,2132957.1,145.6,10
R, 18, 67, 500
6138351.6,2132878.4,143.3,10A
R, 19, 67, 500
6138591.3,2133051.6,149.1,11
R, 20, 67, 500
6138595.7,2132953.6,143.7,11A
R, 21, 67, 500
6138827.7,2133087.7,140.8,12
R, 22, 67, 500
6138943.9,2133222.9,152.1,13
R, 23, 67, 500
6138915.9,2133073.7,151.4,13A
R, 24, 67, 500
6139115.1,2133310.9,155.5,14
R, 25, 67, 500
6139110.8,2133065,154.2,14A
R, 26, 67, 500
6139170.8,2133347.1,156,R-1
R, 27, 67, 500
6139315.3,2133417,157.2,15
R, 28, 67, 500
6139380.7,2133157.7,157.5,15A
R, 29, 67, 500
6139385.9,2133429.5,157.8,16 K3 A1
R, 30, 67, 500
6139527.4,2133264.5,158.5,16A
R, 31, 67, 500
6139497.5,2133469.1,159.9,17
R, 32, 67, 500
6139760.4,2133498.1,166.9,17A
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R, 33, 67, 500
6139754.1,2133573.5,162,18
R, 34, 67, 500
6139849.1,2133516.9,157.2,18A
R, 35, 67, 500
6139916.6,2133630.9,160.1,19
R, 36, 67, 500
6140248.5,2133582.6,160.3,19A
R, 37, 67, 500
6140101.9,2133708.7,161.3,20
R, 38, 67, 500
6140181.3,2133741.7,161.2,21
R, 39, 67, 500
6141145.5,2134412.4,167.4,21 M
R, 40, 67, 500
6141351.5,2134492.4,168.2,21N
D, 4.5
ALL, ALL
K,  -2
ALL, 1,3,6,7,9,10,12
K,  -2
ALL, 14,16,17,19,21,22,24
K,  -2
ALL, 26,27,29,31,33,35,37
K,  -2
ALL, 38,39,40
K,  -9
ALL, 2,4,5,8,11,13,15
K,  -9
ALL, 18,20,23,25,28,30
K,  -9
ALL, 32,34,36
C,C
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SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (Eastbound) 8 FT. WALL with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	8.*							21+58	15.6	
34	-	8.*							21+60	20.9	
35	-	8.*							21+65	178.6	
36	-	8.*							22+20	260.3	
37	-	8.*							23+00	138.6	
38	-	8.*							23+43	150.8	
39	-	8.*							23+90	159.0	

40	-	8.*		23+39	36.3
41	-	8.*		30+93	11.0
42	-	8.*		30+95	18.0
43	-	8.*		31+00	196.9
44	-	8.*		31+60	84.3
45	-	8.*		31+85	27.9
46	-	8.*		27+06	26.4
47	-	8.*		27+12	93.8
48	-	8.*		27+40	202.2
49	-	8.*		28+00	103.4
50	-	8.*		28+31	226.0
51	-	8.*		29+00	158.3
52	-	8.*		29+50	159.4
53	-	8.*		30+00	239.8
54	-	8.*		30+73	10.4
55	-	8.*		30+76	8.6
56	-	8.*		32+13.5	8.2
57	-	8.*		32+15	22.1
58	-	8.*		32+20	101.6
59	-	8.*		32+50	109.6
60	-	8.*		32+82	10.0
61	-	8.*		32+84	55.5
62	-	8.*		33+00	50.8
63	-	8.*		33+15	46.3
64	-	8.*		24+65	35.9
65	-	8.*		24+73	216.7
66	-	8.*		25+40	197.7
67	-	8.*		26+00	128.8
68	-	8.*		26+40	127.6
69	-	8.*		26+78	40.4
70	-	8.*		35+38	278.9
71	-	8.*		36+35	158.1

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	67.9
2	1A	67.	500.	58.6
3	2	67.	500.	61.0
4	2A	67.	500.	55.0
5	3A	67.	500.	54.2
6	R-2 K-1	67.	500.	61.1
7	4	67.	500.	61.1
8	4A	67.	500.	54.4
9	5	67.	500.	60.7
10	6	67.	500.	64.8
11	6A	67.	500.	56.6
12	7	67.	500.	65.3
13	7A	67.	500.	55.7
14	8	67.	500.	62.2
15	8A	67.	500.	55.3
16	9	67.	500.	63.6

```
 17  10          67.     500.    65.8
 18  10A         67.     500.    57.4
 19  11          67.     500.    66.5
 20  11A         67.     500.    57.9
 21  12          67.     500.    62.3
 22  13          67.     500.    63.4
 23  13A         67.     500.    56.7
 24  14          67.     500.    63.1
 25  14A         67.     500.    54.9
 26  R-1         67.     500.    62.7
 27  15          67.     500.    62.2
 28  15A         67.     500.    54.2
 29  16 K3 A1    67.     500.    62.9
 30  16A         67.     500.    54.9
 31  17          67.     500.    63.1
 32  17A         67.     500.    59.1
 33  18          67.     500.    63.9
 34  18A         67.     500.    56.5
 35  19          67.     500.    62.2
 36  19A         67.     500.    56.3
 37  20          67.     500.    62.5
 38  21          67.     500.    63.5
 39  21 M        67.     500.    69.1
 40  21N         67.     500.    67.3
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
8.
  8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 10 FT. WALL with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	10.*							21+58	15.6	
34	-	10.*							21+60	20.9	
35	-	10.*							21+65	178.6	
36	-	10.*							22+20	260.3	
37	-	10.*							23+00	138.6	
38	-	10.*							23+43	150.8	
39	-	10.*							23+90	159.0	

40	-	10.*	23+39	36.3
41	-	10.*	24+65	35.9
42	-	10.*	24+73	216.7
43	-	10.*	25+40	197.7
44	-	10.*	26+00	128.8
45	-	10.*	26+40	127.6
46	-	10.*	26+78	40.4
47	-	10.*	27+06	26.4
48	-	10.*	27+12	93.8
49	-	10.*	27+40	202.2
50	-	10.*	28+00	103.4
51	-	10.*	28+31	226.0
52	-	10.*	29+00	158.3
53	-	10.*	29+50	159.4
54	-	10.*	30+00	239.8
55	-	10.*	30+73	10.4
56	-	10.*	30+76	8.6
57	-	10.*	30+93	11.0
58	-	10.*	30+95	18.0
59	-	10.*	31+00	196.9
60	-	10.*	31+60	84.3
61	-	10.*	31+85	27.9
62	-	10.*	32+13.5	8.2
63	-	10.*	32+15	22.1
64	-	10.*	32+20	101.6
65	-	10.*	32+50	109.6
66	-	10.*	32+82	10.0
67	-	10.*	32+84	55.5
68	-	10.*	33+00	50.8
69	-	10.*	33+15	46.3
70	-	10.*	35+38	278.9
71	-	10.*	35+38	278.9

---

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	65.2
2	1A	67.	500.	57.3
3	2	67.	500.	59.7
4	2A	67.	500.	53.8
5	3A	67.	500.	52.7
6	R-2 K-1	67.	500.	59.7
7	4	67.	500.	59.7
8	4A	67.	500.	52.9
9	5	67.	500.	59.4
10	6	67.	500.	63.1
11	6A	67.	500.	55.5
12	7	67.	500.	63.5
13	7A	67.	500.	54.5
14	8	67.	500.	60.7
15	8A	67.	500.	53.8
16	9	67.	500.	61.9

```
 17  10         67.    500.   63.8
 18  10A        67.    500.   56.1
 19  11         67.    500.   64.4
 20  11A        67.    500.   57.0
 21  12         67.    500.   60.7
 22  13         67.    500.   61.8
 23  13A        67.    500.   55.2
 24  14         67.    500.   61.6
 25  14A        67.    500.   53.6
 26  R-1        67.    500.   61.1
 27  15         67.    500.   60.7
 28  15A        67.    500.   53.0
 29  16 K3 A1   67.    500.   61.3
 30  16A        67.    500.   53.7
 31  17         67.    500.   61.5
 32  17A        67.    500.   58.0
 33  18         67.    500.   62.1
 34  18A        67.    500.   55.2
 35  19         67.    500.   60.6
 36  19A        67.    500.   55.6
 37  20         67.    500.   60.8
 38  21         67.    500.   62.0
 39  21 M       67.    500.   68.7
 40  21N        67.    500.   68.1
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
 10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 12 FT. WALL with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							24+20	53.5	
2	-	0.*							24+33	69.4	
3	-	0.*							24+85	34.5	
4	-	0.*							24+85	68.2	
5	-	0.*							25+00	69.4	
6	-	0.*							25+20	44.9	
7	-	0.*							26+40	132.3	
8	-	0.*							26+80	100.7	
9	-	0.*							27+10	85.0	
10	-	0.*							27+10	90.2	
11	-	0.*							27+40	63.1	
12	-	0.*							27+60	30.9	
13	-	0.*							27+60	126.5	
14	-	0.*							28+00	10.2	
15	-	0.*							28+00	98.1	
16	-	0.*							28+65	66.2	
17	-	0.*							28+85	62.3	
18	-	0.*							29+19	183.2	
19	-	0.*							35+20	540.9	
20	-	0.*							36+85	49.3	
21	-	0.*							37+00	196.7	
22	-	0.*							37+60	217.0	
23	-	12.*							21+58	15.6	
24	-	12.*							21+60	20.9	
25	-	12.*							21+65	178.6	
26	-	12.*							22+20	260.3	
27	-	12.*							23+00	138.6	
28	-	12.*							23+43	150.8	
29	-	12.*							23+90	159.0	
30	-	12.*							23+39	36.3	
31	-	12.*							24+65	35.9	
32	-	12.*							24+73	216.7	
33	-	12.*							25+40	197.7	
34	-	12.*							26+00	128.8	
35	-	12.*							26+40	127.6	
36	-	12.*							26+78	40.4	
37	-	12.*							27+06	26.4	
38	-	12.*							27+12	93.8	

39	-	12.*		27+40	202.2
40	-	12.*		28+00	103.4
41	-	12.*		28+31	226.0
42	-	12.*		29+00	158.3
43	-	12.*		29+50	159.4
44	-	12.*		30+00	239.8
45	-	12.*		30+73	10.4
46	-	12.*		30+76	8.6
47	-	12.*		30+93	11.0
48	-	12.*		30+95	18.0
49	-	12.*		31+00	196.9
50	-	12.*		31+60	84.3
51	-	12.*		31+85	27.9
52	-	12.*		32+13.5	8.2
53	-	12.*		32+15	22.1
54	-	12.*		32+20	101.6
55	-	12.*		32+50	109.6
56	-	12.*		32+82	10.0
57	-	12.*		32+84	55.5
58	-	12.*		33+00	50.8
59	-	12.*		33+15	46.3
60	-	12.*		35+38	278.9
61	-	12.*		36+35	158.1

---

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	63.1
2	1A	67.	500.	56.3
3	2	67.	500.	58.6
4	2A	67.	500.	53.0
5	3A	67.	500.	51.5
6	R-2 K-1	67.	500.	58.6
7	4	67.	500.	58.6
8	4A	67.	500.	51.7
9	5	67.	500.	58.3
10	6	67.	500.	61.5
11	6A	67.	500.	54.6
12	7	67.	500.	61.9
13	7A	67.	500.	53.2
14	8	67.	500.	59.4
15	8A	67.	500.	52.4
16	9	67.	500.	60.4
17	10	67.	500.	62.1
18	10A	67.	500.	54.6
19	11	67.	500.	62.6
20	11A	67.	500.	56.1
21	12	67.	500.	59.4
22	13	67.	500.	60.4
23	13A	67.	500.	53.7
24	14	67.	500.	60.2
25	14A	67.	500.	52.2
26	R-1	67.	500.	59.8
27	15	67.	500.	59.5

```
 28  15A        67.     500.    51.7
 29  16 K3 A1   67.     500.    59.9
 30  16A        67.     500.    52.5
 31  17         67.     500.    60.1
 32  17A        67.     500.    56.8
 33  18         67.     500.    60.5
 34  18A        67.     500.    54.1
 35  19         67.     500.    59.2
 36  19A        67.     500.    54.8
 37  20         67.     500.    59.3
 38  21         67.     500.    60.7
 39  21 M       67.     500.    67.2
 40  21N        67.     500.    66.4
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.12.12.12.

12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.
 12.12.12.12.12.12.12.12.12.12.12.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT. WALL EB. with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	14.*							21+58	15.6	
34	-	14.*							21+60	20.9	
35	-	14.*							21+65	178.6	
36	-	14.*							22+20	260.3	
37	-	14.*							23+00	138.6	
38	-	14.*							23+43	150.8	
39	-	14.*							23+90	159.0	

40	-	14.*		23+39	36.3
41	-	14.*		24+65	35.9
42	-	14.*		24+73	216.7
43	-	14.*		25+40	197.7
44	-	14.*		26+00	128.8
45	-	14.*		26+40	127.6
46	-	14.*		26+78	40.4
47	-	14.*		27+06	26.4
48	-	14.*		27+12	93.8
49	-	14.*		27+40	202.2
50	-	14.*		28+00	103.4
51	-	14.*		28+31	226.0
52	-	14.*		29+00	158.3
53	-	14.*		29+50	159.4
54	-	14.*		30+00	239.8
55	-	14.*		30+73	10.4
56	-	14.*		30+76	8.6
57	-	14.*		30+93	11.0
58	-	14.*		30+95	18.0
59	-	14.*		31+00	196.9
60	-	14.*		31+60	84.3
61	-	14.*		31+85	27.9
62	-	14.*		32+13.5	8.2
63	-	14.*		32+15	22.1
64	-	14.*		32+20	101.6
65	-	14.*		32+50	109.6
66	-	14.*		32+82	10.0
67	-	14.*		32+84	55.5
68	-	14.*		33+00	50.8
69	-	14.*		33+15	46.3
70	-	14.*		35+38	278.9
71	-	14.*		36+35	158.1

---

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	61.5
2	1A	67.	500.	55.5
3	2	67.	500.	57.8
4	2A	67.	500.	52.3
5	3A	67.	500.	50.6
6	R-2 K-1	67.	500.	57.7
7	4	67.	500.	57.6
8	4A	67.	500.	50.8
9	5	67.	500.	57.4
10	6	67.	500.	60.2
11	6A	67.	500.	53.8
12	7	67.	500.	60.5
13	7A	67.	500.	52.1
14	8	67.	500.	58.3
15	8A	67.	500.	51.3
16	9	67.	500.	59.1

```
 17  10          67.     500.    60.6
 18  10A         67.     500.    53.4
 19  11          67.     500.    61.1
 20  11A         67.     500.    55.4
 21  12          67.     500.    58.2
 22  13          67.     500.    59.2
 23  13A         67.     500.    52.4
 24  14          67.     500.    59.0
 25  14A         67.     500.    51.0
 26  R-1         67.     500.    58.7
 27  15          67.     500.    58.5
 28  15A         67.     500.    50.6
 29  16 K3 A1    67.     500.    58.8
 30  16A         67.     500.    51.5
 31  17          67.     500.    58.9
 32  17A         67.     500.    55.8
 33  18          67.     500.    59.2
 34  18A         67.     500.    53.2
 35  19          67.     500.    58.1
 36  19A         67.     500.    54.2
 37  20          67.     500.    58.1
 38  21          67.     500.    59.5
 39  21 M        67.     500.    66.1
 40  21N         67.     500.    66.0
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
 14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 ft and 16 FT. With Wrap-Around Wall

1

BARRIER DATA
****

BAR ELE	0	BARRIER HEIGHTS 1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	16.*							21+58	15.6	
34	-	16.*							21+60	20.9	
35	-	16.*							21+65	178.6	
36	-	15.*							22+20	260.3	
37	-	14.*							23+00	138.6	
38	-	14.*							23+43	150.8	
39	-	14.*							23+90	159.0	

40	-	14.*		23+39	36.3
41	-	16.*		24+65	35.9
42	-	16.*		24+73	216.7
43	-	16.*		25+40	197.7
44	-	16.*		26+00	128.8
45	-	16.*		26+40	127.6
46	-	16.*		26+78	40.4
47	-	14.*		27+06	26.4
48	-	14.*		27+12	93.8
49	-	14.*		27+40	202.2
50	-	15.*		28+00	103.5
51	-	15.*		28+31	67.2
52	-	15.*		28+43	2.0
53	-	16.*		28+43	158.8
54	-	16.*		29+00	158.3
55	-	16.*		29+50	159.4
56	-	16.*		30+00	239.8
57	-	16.*		30+73	10.4
58	-	16.*		30+76	8.6
59	-	16.*		30+93	11.0
60	-	16.*		30+95	18.0
61	-	16.*		31+00	196.9
62	-	16.*		31+60	84.3
63	-	16.*		31+85	27.9
64	-	16.*		32+13.5	8.2
65	-	16.*		32+15	22.1
66	-	16.*		32+20	101.6
67	-	16.*		32+50	109.6
68	-	16.*		32+82	10.0
69	-	16.*		32+84	55.5
70	-	16.*		33+00	50.8
71	-	16.*		33+15	46.3
72	-	16.*		35+38	278.9
73	-	16.*		36+35	158.1

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	60.2
2	1A	67.	500.	55.2
3	2	67.	500.	57.4
4	2A	67.	500.	52.0
5	3A	67.	500.	50.3
6	R-2 K-1	67.	500.	57.5
7	4	67.	500.	57.4
8	4A	67.	500.	50.5
9	5	67.	500.	57.1
10	6	67.	500.	59.2
11	6A	67.	500.	53.5
12	7	67.	500.	59.4
13	7A	67.	500.	51.4

```
 14  8          67.     500.    57.5
 15  8A         67.     500.    50.4
 16  9          67.     500.    58.0
 17  10         67.     500.    59.3
 18  10A        67.     500.    52.6
 19  11         67.     500.    61.0
 20  11A        67.     500.    55.2
 21  12         67.     500.    57.8
 22  13         67.     500.    58.5
 23  13A        67.     500.    51.8
 24  14         67.     500.    58.0
 25  14A        67.     500.    50.3
 26  R-1        67.     500.    57.8
 27  15         67.     500.    57.8
 28  15A        67.     500.    49.8
 29  16 K3 A1   67.     500.    57.8
 30  16A        67.     500.    50.8
 31  17         67.     500.    57.9
 32  17A        67.     500.    55.0
 33  18         67.     500.    58.1
 34  18A        67.     500.    52.5
 35  19         67.     500.    57.3
 36  19A        67.     500.    53.7
 37  20         67.     500.    57.2
 38  21         67.     500.    58.5
 39  21 M       67.     500.    65.3
 40  21N        67.     500.    65.7
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.16.16.16.15.14.14.14.14.16.16.16.16.16.16.14.14.14.15.
 15.15.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.
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FUTURE WITH MITIGATION (Eastbound) 8 FT. WALL with wrap-around wall (Pt. 2)
T-ORTEGA HWY, 1
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.7,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00

```
LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                        HING NO.6, 1 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                                        HINGE NO. 7, 2 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                                        HINGE NO. 8, 3 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                                        HINGE NO. 9, 4 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                                        HINGE NO.10, 5 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                                        HINGE NO. 11, 6 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                                        HINGE NO.12, 7 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
```

6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO.1 EB 8 FT, 8, 2 ,0, 0
6136870.1,2132375.6,144.4,152.4,21+58
6136866.2,2132391,145.8,153.8,21+60
6136876.4,2132408.5,147.3,155.3,21+65
6137029,2132502.2,149.3,157.3,22+20
6137254.3,2132632,151,159,23+00
6137378.5,2132693.9,151.4,159.4,23+43
6137515.8,2132755.7,150.3,158.3,23+90
6137663.9,2132814.2,151.2,159.2,23+39
6137696.8,2132799.2,149.3,157.3,24+47
BARRIER NO.4 EB 8 FT, 9, 2 ,0, 0
6139668.3,2133553.8,162.4,170.4,30+93
6139668.8,2133565.1,162.4,170.4,30+95
6139683.8,2133575.2,162.4,170.4,31+00
6139869.6,2133640.7,163.2,171.2,31+60
6139949,2133668.7,163.1,171.1,31+85
6139976,2133661.5,163.1,171.1,31+92
BARRIER NO. 3 EB 8 FT, 10, 2 ,0, 0
6138509.3,2133037.5,144.4,152.4,27+06
6138525.3,2133058.8,146,154,27+12
6138612.7,2133093.9,147.5,155.5,27+40
6138794.7,2133181.9,151.1,159.1,28+00
6138889,2133223.8,153.3,161.3,28+31
6139084.1,2133337.7,159.1,167.1,29+00
6139226.6,2133406.9,160.8,168.8,29+50
6139375.1,2133464.8,161.4,169.4,30+00
6139601,2133544.9,164,172,30+73
6139610.8,2133541.6,164,172,30+76
6139616,2133534.9,164,172,30+76.5
BARRIER NO. 5 EB 8FT, 11, 2 ,0, 0
6140044.9,2133687,159.1,167.1,32+13.5
6140044.8,2133695.3,160.8,168.8,32+15
6140056.1,2133714,163.2,171.2,32+20
6140148.6,2133755.6,163.4,171.4,32+50
6140245.4,2133807.1,162.4,170.4,32+82
6140245.9,2133816.4,162.4,170.4,32+84
6140298.5,2133832.9,154,162,33+00
6140341.5,2133859.6,153.5,161.5,33+15
6140380.3,2133885.3,154,162,33+29
BARRIER NO.2 EB 8FT, 12, 2 ,0, 0
6137752.5,2132819.3,149.3,157.3,24+65
6137768.3,2132851.1,152.2,160.2,24+73
6137975.7,2132914.9,150.8,158.8,25+40
6138167.9,2132959.8,147.7,155.7,26+00
6138293.2,2132990.8,145.7,153.7,26+40
6138416.7,2133022.9,145.4,153.4,26+78
6138448.7,2132998.5,139.4,147.4,26+86
BARRIER NO.6 EB 8 FT, 13, 2 ,0, 0
6140930.6,2134304.5,161.2,169.2,35+38
6141146.1,2134482.1,163.7,171.7,36+23
BARRIER NO. 6A, 14, 2 ,0, 0
6141176.2,2134507.3,164.9,172.9,36+35
6141298.4,2134606.9,166.4,174.4,36+53
R, 1 , 67 ,500
6139611.9,2133483.2,160.2,17B
R, 2 , 67 ,500
6137033.8,2132347.8,132.6,2B

```
R, 3 , 67 ,500
6137672.9,2132677.8,136.6,5B
D, 4.5
ALL,ALL
K,-2
ALL,1,3
K,-9
ALL,2
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (Eastbound) 8 FT. WALL With wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	8.*							21+58	15.6	
34	-	8.*							21+60	20.9	
35	-	8.*							21+65	178.6	
36	-	8.*							22+20	260.3	
37	-	8.*							23+00	138.6	
38	-	8.*							23+43	150.8	
39	-	8.*							23+90	159.0	

40	-	8.*	23+39	36.3
41	-	8.*	30+93	11.0
42	-	8.*	30+95	18.0
43	-	8.*	31+00	196.9
44	-	8.*	31+60	84.3
45	-	8.*	31+85	27.9
46	-	8.*	27+06	26.4
47	-	8.*	27+12	93.8
48	-	8.*	27+40	202.2
49	-	8.*	28+00	103.4
50	-	8.*	28+31	226.0
51	-	8.*	29+00	158.3
52	-	8.*	29+50	159.4
53	-	8.*	30+00	239.8
54	-	8.*	30+73	10.4
55	-	8.*	30+76	8.6
56	-	8.*	32+13.5	8.2
57	-	8.*	32+15	22.1
58	-	8.*	32+20	101.6
59	-	8.*	32+50	109.6
60	-	8.*	32+82	10.0
61	-	8.*	32+84	55.5
62	-	8.*	33+00	50.8
63	-	8.*	33+15	46.3
64	-	8.*	24+65	35.9
65	-	8.*	24+73	216.7
66	-	8.*	25+40	197.7
67	-	8.*	26+00	128.8
68	-	8.*	26+40	127.6
69	-	8.*	26+78	40.4
70	-	8.*	35+38	278.9
71	-	8.*	36+35	158.1

```
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE    LEQ(CAL)
 --------------------------------
  1  17B        67.     500.    66.3
  2  2B         67.     500.    55.7
  3  5B         67.     500.    63.1
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
8.
  8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 10 FT. WALL without wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	10.*							21+58	15.6	
34	-	10.*							21+60	20.9	
35	-	10.*							21+65	178.6	
36	-	10.*							22+20	260.3	
37	-	10.*							23+00	138.6	
38	-	10.*							23+43	150.8	
39	-	10.*							23+90	159.0	

```
 40      -  10.*                                        23+39       36.3

 41      -  10.*                                        24+65       35.9
 42      -  10.*                                        24+73      216.7
 43      -  10.*                                        25+40      197.7
 44      -  10.*                                        26+00      128.8
 45      -  10.*                                        26+40      127.6
 46      -  10.*                                        26+78       40.4

 47      -  10.*                                        27+06       26.4
 48      -  10.*                                        27+12       93.8
 49      -  10.*                                        27+40      202.2
 50      -  10.*                                        28+00      103.4
 51      -  10.*                                        28+31      226.0
 52      -  10.*                                        29+00      158.3
 53      -  10.*                                        29+50      159.4
 54      -  10.*                                        30+00      239.8
 55      -  10.*                                        30+73       10.4
 56      -  10.*                                        30+76        8.6

 57      -  10.*                                        30+93       11.0
 58      -  10.*                                        30+95       18.0
 59      -  10.*                                        31+00      196.9
 60      -  10.*                                        31+60       84.3
 61      -  10.*                                        31+85       27.9

 62      -  10.*                                        32+13.5      8.2
 63      -  10.*                                        32+15       22.1
 64      -  10.*                                        32+20      101.6
 65      -  10.*                                        32+50      109.6
 66      -  10.*                                        32+82       10.0
 67      -  10.*                                        32+84       55.5
 68      -  10.*                                        33+00       50.8
 69      -  10.*                                        33+15       46.3

 70      -  10.*                                        35+38      278.9

 71      -  10.*                                        35+38      278.9
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B        67.    500.   65.7
  2  2B         67.    500.   54.8
  3  5B         67.    500.   62.2
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
 10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 12 FT. WALL with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							24+20	53.5	
2	-	0.*							24+33	69.4	
3	-	0.*							24+85	34.5	
4	-	0.*							24+85	68.2	
5	-	0.*							25+00	69.4	
6	-	0.*							25+20	44.9	
7	-	0.*							26+40	132.3	
8	-	0.*							26+80	100.7	
9	-	0.*							27+10	85.0	
10	-	0.*							27+10	90.2	
11	-	0.*							27+40	63.1	
12	-	0.*							27+60	30.9	
13	-	0.*							27+60	126.5	
14	-	0.*							28+00	10.2	
15	-	0.*							28+00	98.1	
16	-	0.*							28+65	66.2	
17	-	0.*							28+85	62.3	
18	-	0.*							29+19	183.2	
19	-	0.*							35+20	540.9	
20	-	0.*							36+85	49.3	
21	-	0.*							37+00	196.7	
22	-	0.*							37+60	217.0	
23	-	12.*							21+58	15.6	
24	-	12.*							21+60	20.9	
25	-	12.*							21+65	178.6	
26	-	12.*							22+20	260.3	
27	-	12.*							23+00	138.6	
28	-	12.*							23+43	150.8	
29	-	12.*							23+90	159.0	
30	-	12.*							23+39	36.3	
31	-	12.*							24+65	35.9	
32	-	12.*							24+73	216.7	
33	-	12.*							25+40	197.7	
34	-	12.*							26+00	128.8	
35	-	12.*							26+40	127.6	
36	-	12.*							26+78	40.4	
37	-	12.*							27+06	26.4	
38	-	12.*							27+12	93.8	

```
 39      -  12.*                                        27+40       202.2
 40      -  12.*                                        28+00       103.4
 41      -  12.*                                        28+31       226.0
 42      -  12.*                                        29+00       158.3
 43      -  12.*                                        29+50       159.4
 44      -  12.*                                        30+00       239.8
 45      -  12.*                                        30+73        10.4
 46      -  12.*                                        30+76         8.6

 47      -  12.*                                        30+93        11.0
 48      -  12.*                                        30+95        18.0
 49      -  12.*                                        31+00       196.9
 50      -  12.*                                        31+60        84.3
 51      -  12.*                                        31+85        27.9

 52      -  12.*                                        32+13.5       8.2
 53      -  12.*                                        32+15        22.1
 54      -  12.*                                        32+20       101.6
 55      -  12.*                                        32+50       109.6
 56      -  12.*                                        32+82        10.0
 57      -  12.*                                        32+84        55.5
 58      -  12.*                                        33+00        50.8
 59      -  12.*                                        33+15        46.3

 60      -  12.*                                        35+38       278.9

 61      -  12.*                                        36+35       158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID    DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B       67.    500.   65.2
  2  2B        67.    500.   54.2
  3  5B        67.    500.   61.5
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.12.12.12.

12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.
 12.12.12.12.12.12.12.12.12.12.12.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT. WALL EB. with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	14.*							21+58	15.6	
34	-	14.*							21+60	20.9	
35	-	14.*							21+65	178.6	
36	-	14.*							22+20	260.3	
37	-	14.*							23+00	138.6	
38	-	14.*							23+43	150.8	
39	-	14.*							23+90	159.0	

```
 40      -  14.*                                          23+39       36.3

 41      -  14.*                                          24+65       35.9
 42      -  14.*                                          24+73      216.7
 43      -  14.*                                          25+40      197.7
 44      -  14.*                                          26+00      128.8
 45      -  14.*                                          26+40      127.6
 46      -  14.*                                          26+78       40.4

 47      -  14.*                                          27+06       26.4
 48      -  14.*                                          27+12       93.8
 49      -  14.*                                          27+40      202.2
 50      -  14.*                                          28+00      103.4
 51      -  14.*                                          28+31      226.0
 52      -  14.*                                          29+00      158.3
 53      -  14.*                                          29+50      159.4
 54      -  14.*                                          30+00      239.8
 55      -  14.*                                          30+73       10.4
 56      -  14.*                                          30+76        8.6

 57      -  14.*                                          30+93       11.0
 58      -  14.*                                          30+95       18.0
 59      -  14.*                                          31+00      196.9
 60      -  14.*                                          31+60       84.3
 61      -  14.*                                          31+85       27.9

 62      -  14.*                                          32+13.5      8.2
 63      -  14.*                                          32+15       22.1
 64      -  14.*                                          32+20      101.6
 65      -  14.*                                          32+50      109.6
 66      -  14.*                                          32+82       10.0
 67      -  14.*                                          32+84       55.5
 68      -  14.*                                          33+00       50.8
 69      -  14.*                                          33+15       46.3

 70      -  14.*                                          35+38      278.9

 71      -  14.*                                          36+35      158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE    LEQ(CAL)
 --------------------------------
  1  17B        67.    500.    64.9
  2  2B         67.    500.    53.8
  3  5B         67.    500.    61.0
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
 14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 ft and 16 FT. with wrap-around wall

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	16.*							21+58	15.6	
34	-	16.*							21+60	20.9	
35	-	16.*							21+65	178.6	
36	-	15.*							22+20	260.3	
37	-	14.*							23+00	138.6	
38	-	14.*							23+43	150.8	
39	-	14.*							23+90	159.0	

```
 40      -  14.*                                        23+39       36.3

 41      -  16.*                                        24+65       35.9
 42      -  16.*                                        24+73      216.7
 43      -  16.*                                        25+40      197.7
 44      -  16.*                                        26+00      128.8
 45      -  16.*                                        26+40      127.6
 46      -  16.*                                        26+78       40.4

 47      -  14.*                                        27+06       26.4
 48      -  14.*                                        27+12       93.8
 49      -  14.*                                        27+40      202.2
 50      -  15.*                                        28+00      103.5
 51      -  15.*                                        28+31       67.2
 52      -  15.*                                        28+43        2.0
 53      -  16.*                                        28+43      158.8
 54      -  16.*                                        29+00      158.3
 55      -  16.*                                        29+50      159.4
 56      -  16.*                                        30+00      239.8

 57      -  16.*                                        30+73       10.4
 58      -  16.*                                        30+76        8.6

 59      -  16.*                                        30+93       11.0
 60      -  16.*                                        30+95       18.0
 61      -  16.*                                        31+00      196.9
 62      -  16.*                                        31+60       84.3
 63      -  16.*                                        31+85       27.9

 64      -  16.*                                        32+13.5      8.2
 65      -  16.*                                        32+15       22.1
 66      -  16.*                                        32+20      101.6
 67      -  16.*                                        32+50      109.6
 68      -  16.*                                        32+82       10.0
 69      -  16.*                                        32+84       55.5
 70      -  16.*                                        33+00       50.8
 71      -  16.*                                        33+15       46.3

 72      -  16.*                                        35+38      278.9

 73      -  16.*                                        36+35      158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE    LEQ(CAL)
 --------------------------------
  1  17B         67.     500.    64.7
  2  2B          67.     500.    53.6
  3  5B          67.     500.    60.8
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
```

```
  0. 0. 0. 0. 0. 0.
0.16.16.16.15.14.14.14.14.16.16.16.16.16.16.14.14.14.15.
 15.15.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.
```

```
FUTURE WITH  MITIGATION (WESTBOUND) 8 FT. WALL
T-ORTEGA HWY, 1
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
 942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
 942 , 55 , 79 , 55 , 237 , 55
LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382.2,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132519.5,148,22+00
N,6137223.8,2132687.3,151,23+00
N,6137521.8,2132829.3,150.2,24+00
N,6137832.9,2132939.1,151,25+00
N,6138150.1,2133025.9,145.8,26+00
N,6138465.5,2133112.7,145.2,27+00
N,6138764.1,2133238.2,150.4,28+00
N,6139047,2133404.3,158,29+00
N,6139350,2133536.5,160.2,30+00
N,6139659,2133646.1,162.1,31+00
N,6139967.8,2133757.5,163.3,32+00
N,6140259.7,2133898.4,161.8,33+00
6140528,2134084,161.4,34+00
LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279.2,164.4,35+00
N,6141044.1,2134486.9,167.7,36+00
N,6141298,2134695.3,171.2,37+00
N,6141551.5,2134903.4,175.5,38+00
N,6141828.4,2135084.7,179.9,39+00
N,6142136.4,2135206.1,181.3,40+00
N,6142461.4,2135262.5,176.5,41+00
N,6142787.5,2135301.7,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359.2,174.1,44+00
N,6143765.3,2135403.1,183.7,45+00
N,6144088.6,2135457.6,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135629.9,239.8,48+00
6145034,2135719.7,259.2
LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132351.5,144.8,21+20
N,6136834.8,2132412.1,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132656.4,151,23+00
N,6137535.3,2132796.5,149.9,24+00
N,6137843.1,2132905.1,151.1,25+00
N,6138159.4,2132991.7,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207.1,150.9,28+00
N,6139064.3,2133373.3,158.3,29+00
N,6139361.8,2133503.1,160.8,30+00
N,6139670.9,2133612.6,162.7,31+00
N,6139980.6,2133724.4,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134055.5,161.7,34+00
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LANE 4 (EASTBOUND), 4
N,6140548.9,2134055.5,161.7,34+00
N,6140812.8,2134251.5,164.3,35+00
N,6141066.6,2134459.6,167.3,36+00
N,6141320.4,2134667.9,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053.3,179.1,39+00
N,6142145.7,2135171.9,178.5,40+00
N,6142465.7,2135227.3,176.7,41+00
N,6142791.7,2135266.6,173.8,42+00
N,6143117.6,2135297.7,170.4,43+00
N,6143445.1,2135323.9,173.9,44+00
N,6143771.1,2135368.1,183.7,45+00
N,6144094.5,2135422.5,201.1,46+00
N,6144416.2,2135496.9,220,47+00
N,6144729.4,2135596.2,241.7,48+00
6145039.6,2135702.9,259.5,49+00
B-                          HINGE NO.1 EASTBOUND, 1 , 1 ,0, 0
6136856.1,2132379.1,147.4,147.4,21+55
6136876.4,2132408.5,147.4,147.4,21+65
6136972.5,2132467.5,148.4,148.4,22+00
6137029,2132502.2,148.4,148.4,22+20
6137259.2,2132623,151.5,151.5,23+00
6137550.9,2132757.3,150.3,150.3,24+00
6137610.4,2132783.5,150.9,150.9,24+20
6137678.2,2132732,144.4,144.4,24+33
B-                          HINGE NO. 2 EASTBOUND, 2 , 1 ,0, 0
6137819.2,2132766.4,144.4,144.4,24+80
6137792.8,2132847.7,150.9,150.9,24+80
6137852.2,2132874.8,150.9,150.9,25+00
6138167.9,2132959.8,147.6,147.6,26+00
6138422.7,2133023.9,145.4,145.4,26+80
B-                          HINGE NO. 3 EASTBOUND, 3 , 1 ,0, 0
6138509.3,2133037.9,144.4,144.4,27+06
6138525.3,2133058.8,146,146,27+12
6138612.7,2133093.9,147.5,147.5,27+40
6138884,2133232.3,153.3,153.3,28+31
6138889,2133223.8,153.3,153.3,28+31
6139084.1,2133337.7,159.1,159.1,29+00
6139375.1,2133464.8,161.4,161.4,30+00
6139606.8,2133543.2,164,164,30+75
6139621.1,2133511.5,160.8,160.8,30+76
B-                          HINGE NO. 4, 4 , 1 ,0, 0
6139673.8,2133551,162.4,162.4,30+95
6139668.8,2133565.1,164,164,30+95
6139683.8,2133575.2,164,164,31+00
6139869.6,2133640.7,163.2,163.2,31+60
6139949,2133668.7,163.1,163.1,31+85
6139976,2133661.5,163.1,163.1,31+92
6139983.4,2133572.8,157.5,157.5,31+85
B-                          HINGE NO. 5 EASTBOUND, 5 , 2 ,0, 0
6140048.1,2133586.8,158.3,158.3,32+04
6140044.8,2133695.3,163.4,163.4,32+15
6140056.1,2133714,163.4,163.4,32+20
6140148.6,2133755.6,163.4,163.4,32+50
6140248.9,2133820.4,163.4,163.4,32+85
B-                       HING NO.6, 6 , 1 ,0, 0
6136796.3,2132601.3,177.2,177.2,21+75
6136827.1,2132579.9,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
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6136925.8,2132669.8,182.3,182.3,22+20
6137111.5,2132894.2,211.6,211.6,23+00
6137266.2,2133027.4,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132971.9,196.9,196.9,23+80
6137395.9,2132951.3,187,187,23+80
6137468.7,2132954.3,187,187,24+00
6137549.9,2132941.5,173.9,173.9,24+20
B-                    HINGE NO. 7, 7 , 1 ,0, 0
6137549.9,2132941.5,173.9,173.9,24+20
6137580.4,2132985.6,173.9,173.9,24+33
6137573.7,2133054.5,170.6,170.6,24+40
B-                    HINGE NO. 8, 8 , 1 ,0, 0
6137718.2,2133134.9,177.2,177.2,24+85
6137728,2133101.5,178.8,178.8,24+85
6137791.6,2133076.5,178.8,178.8,25+00
6137859.5,2133090.5,180.4,180.4,25+20
6137847,2133133.4,183.7,183.7,25+20
B-                    HINGE NO. 9, 9 , 1 ,0, 0
6138243.6,2133179.6,196.9,196.9,26+40
6138367.7,2133225.8,196.9,196.9,26+80
6138445,2133289.4,203.4,203.4,27+10
6138468.8,2133213.6,173.9,173.9,27+10
6138556.9,2133233.1,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133218.7,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276.2,157.5,157.5,28+00
6138829.2,2133323.9,157.5,157.5,28+31
B-                    HINGE NO.10, 10 , 1 ,0, 0
6138914.9,2133397.1,164,164,28+65
6138974.9,2133424.4,164,164,28+85
6139005.9,2133479.2,164,164,29+00
B-                    HINGE NO. 11, 11 , 1 ,0, 0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133556.9,161.2,161.2,29+73
B-                    HINGE NO.12, 12 , 1 ,0, 0
6140809.2,2134360.9,178,178,35+20
6141228.1,2134703.2,178.3,178.3,36+85
6141265.6,2134734.7,178.1,178.1,37+00
6141419.1,2134857.9,179.6,179.6,37+60
6141495.3,2135060.6,184.7,184.7,38+00
BARRIER NO. 8 WB 8 FT, 13, 2 ,0, 0
6137697.9,2132979.9,154.2,162.2,24+65
6137730.3,2132937.5,154.3,162.3,24+70
6137950.4,2133008.6,154.6,162.6,25+40
6138002.4,2133034.6,160.8,168.8,25+57.5
BARRIER NO. 9 WB 8 FT, 14, 2 ,0, 0
6138110.8,2133055.2,162.4,170.4,25+91
6138142.2,2133053.3,158.3,166.3,26+00
6138488.3,2133149.9,153.4,161.4,27+10
6138577.6,2133182.6,154.2,162.2,27+40
6138610.7,2133210.3,156.8,164.8,27+53
BARRIER NO. 11 WB 8 FT, 15, 2 ,0, 0
6139080,2133462.1,160.2,168.2,29+17
6139248.2,2133559.5,161.2,169.2,29+74
BARRIER NO. 7 WB 8 FT, 16, 2 ,0, 0
6136777.7,2132526.4,150.9,158.9,21+58
6136826.9,2132489,150.1,158.1,21+65
6137092.7,2132650.4,152.4,160.4,22+60
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6137209.7,2132714.6,153.4,161.4,23+00
6137373.8,2132795.8,153.7,161.7,23+55
6137573,2132880.3,152.7,160.7,24+20
6137636.4,2132904.3,153,161,24+40.5
6137641,2132953.5,154.2,162.2,24+47
BARRIER NO. 10 WB 8 FT, 17, 2 ,0, 0
6138628.4,2133224.2,157.5,165.5,27+60
6138744.2,2133274.9,155.3,163.3,28+00
6138832.2,2133319.3,156,164,28+31
6138887.3,2133351,157.1,165.1,28+50
6139048.7,2133443.8,159.4,167.4,29+6.3
BARRIER NO. 12 WB 8 FT, 18, 2 ,0, 0
6140809.2,2134360.9,177.5,185.5,35+20
6141243.7,2134701.1,173.8,181.8,36+91.5
BARRIER NO. 13 WB 8 FT, 19, 2 ,0, 0
6141262,2134715.4,173.4,181.4,36+96
6141525.3,2134935.3,183.1,191.1,38+00
R, 1, 67, 500
6136851.5,2132607.9,183.8,22
R, 2, 67, 500
6136982.3,2132770,203.2,23
R, 3, 67, 500
6137151.7,2132981.5,226.7,24
R, 4, 67, 500
6137351,2132980.4,206.5,25
R, 5, 67, 500
6137535.2,2132954.8,179.6,26
R, 6, 67, 500
6137808.2,2133124.4,186.6,27
R, 7, 67, 500
6138316.4,2133238.1,216.4,28 - K4
R, 8, 67, 500
6138488,2133232.4,180.5,29
R, 9, 67, 500
6138696.2,2133301.4,172.3,30
R, 10, 67, 500
6138993,2133460.9,170.2,R-3K-5 31
R, 11, 67, 500
6139137.8,2133541.6,166.4,32
R, 12, 67, 500
6140882,2134476.7,185.4,33
R, 13, 67, 500
6141136,2134687.9,184.7,34
R, 14, 67, 500
6141275.7,2134813.5,184.7,35
D, 4.5
ALL, ALL
K,   0
ALL, 9
K,   0
ALL, 1,2,3,4,5,6,7,8
K,   3
ALL, 10,11,12,13,14
C,C
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SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (WESTBOUND) 8 FT. WALL

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*		24+33	69.4
42	-	0.*		24+85	34.5
43	-	0.*		24+85	68.2
44	-	0.*		25+00	69.4
45	-	0.*		25+20	44.9
46	-	0.*		26+40	132.3
47	-	0.*		26+80	100.7
48	-	0.*		27+10	85.0
49	-	0.*		27+10	90.2
50	-	0.*		27+40	63.1
51	-	0.*		27+60	30.9
52	-	0.*		27+60	126.5
53	-	0.*		28+00	10.2
54	-	0.*		28+00	98.1
55	-	0.*		28+65	66.2
56	-	0.*		28+85	62.3
57	-	0.*		29+19	183.2
58	-	0.*		35+20	540.9
59	-	0.*		36+85	49.3
60	-	0.*		37+00	196.7
61	-	0.*		37+60	217.0
62	-	8.*		24+65	53.1
63	-	8.*		24+70	231.2
64	-	8.*		25+40	58.5
65	-	8.*		25+91	31.3
66	-	8.*		26+00	359.9
67	-	8.*		27+10	94.9
68	-	8.*		27+40	42.7
69	-	8.*		29+17	194.5
70	-	8.*		21+58	62.4
71	-	8.*		21+65	311.0
72	-	8.*		22+60	133.4
73	-	8.*		23+00	183.4
74	-	8.*		23+55	216.0
75	-	8.*		24+20	67.9
76	-	8.*		24+40.5	50.2
77	-	8.*		27+60	126.3
78	-	8.*		28+00	98.4
79	-	8.*		28+31	64.1
80	-	8.*		28+50	185.9
81	-	8.*		35+20	551.7
82	-	8.*		36+96	342.8

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0 1 2 3 4 5 6 7

1

REC REC ID DNL PEOPLE LEQ(CAL)

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  1  22          67.     500.    70.7
  2  23          67.     500.    67.9
  3  24          67.     500.    64.1
  4  25          67.     500.    67.4
  5  26          67.     500.    69.5
  6  27          67.     500.    65.0
  7  28 - K4     67.     500.    68.4
  8  29          67.     500.    69.9
  9  30          67.     500.    71.5
 10  R-3K-5 3    67.     500.    74.4
 11  32          67.     500.    72.2
 12  33          67.     500.    70.5
 13  34          67.     500.    72.1
 14  35          67.     500.    71.6
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
8.
  8. 8. 8. 8. 8. 8. 8.
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SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (WESTBOUND) 10 FT. WALL

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*		24+33	69.4
42	-	0.*		24+85	34.5
43	-	0.*		24+85	68.2
44	-	0.*		25+00	69.4
45	-	0.*		25+20	44.9
46	-	0.*		26+40	132.3
47	-	0.*		26+80	100.7
48	-	0.*		27+10	85.0
49	-	0.*		27+10	90.2
50	-	0.*		27+40	63.1
51	-	0.*		27+60	30.9
52	-	0.*		27+60	126.5
53	-	0.*		28+00	10.2
54	-	0.*		28+00	98.1
55	-	0.*		28+65	66.2
56	-	0.*		28+85	62.3
57	-	0.*		29+19	183.2
58	-	0.*		35+20	540.9
59	-	0.*		36+85	49.3
60	-	0.*		37+00	196.7
61	-	0.*		37+60	217.0
62	-	10.*		21+58	62.4
63	-	10.*		21+65	311.0
64	-	10.*		22+60	133.4
65	-	10.*		23+00	183.4
66	-	10.*		23+55	216.0
67	-	10.*		24+20	67.9
68	-	10.*		24+40.5	50.2
69	-	10.*		24+65	53.1
70	-	10.*		24+70	231.2
71	-	10.*		25+40	58.5
72	-	10.*		25+91	31.3
73	-	10.*		26+00	359.9
74	-	10.*		27+10	94.9
75	-	10.*		27+40	42.7
76	-	10.*		27+60	126.3
77	-	10.*		28+00	98.4
78	-	10.*		28+31	64.1
79	-	10.*		28+50	185.9
80	-	10.*		35+20	551.7
81	-	10.*		36+96	342.8
82	-	10.*		29+17	194.5

---

0 1 2 3 4 5 6 7

1

REC REC ID DNL PEOPLE LEQ(CAL)

```
  1  22          67.     500.    70.5
  2  23          67.     500.    67.7
  3  24          67.     500.    64.0
  4  25          67.     500.    67.1
  5  26          67.     500.    69.0
  6  27          67.     500.    64.7
  7  28 - K4     67.     500.    68.0
  8  29          67.     500.    69.1
  9  30          67.     500.    70.1
 10  R-3K-5 3    67.     500.    73.5
 11  32          67.     500.    70.5
 12  33          67.     500.    69.2
 13  34          67.     500.    70.7
 14  35          67.     500.    69.9
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.10.10.10.10.10.10.10.10.10.10.10.10.10.
 10.10.10.10.10.10.10.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (WESTBOUND) 12 FT. WALL

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*	24+33	69.4
42	-	0.*	24+85	34.5
43	-	0.*	24+85	68.2
44	-	0.*	25+00	69.4
45	-	0.*	25+20	44.9
46	-	0.*	26+40	132.3
47	-	0.*	26+80	100.7
48	-	0.*	27+10	85.0
49	-	0.*	27+10	90.2
50	-	0.*	27+40	63.1
51	-	0.*	27+60	30.9
52	-	0.*	27+60	126.5
53	-	0.*	28+00	10.2
54	-	0.*	28+00	98.1
55	-	0.*	28+65	66.2
56	-	0.*	28+85	62.3
57	-	0.*	29+19	183.2
58	-	0.*	35+20	540.9
59	-	0.*	36+85	49.3
60	-	0.*	37+00	196.7
61	-	0.*	37+60	217.0
62	-	12.*	21+58	62.4
63	-	12.*	21+65	311.0
64	-	12.*	22+60	133.4
65	-	12.*	23+00	183.4
66	-	12.*	23+55	216.0
67	-	12.*	24+20	67.9
68	-	12.*	24+40.5	50.2
69	-	12.*	24+65	53.1
70	-	12.*	24+70	231.2
71	-	12.*	25+40	58.5
72	-	12.*	25+91	31.3
73	-	12.*	26+00	359.9
74	-	12.*	27+10	94.9
75	-	12.*	27+40	42.7
76	-	12.*	27+60	126.3
77	-	12.*	28+00	98.4
78	-	12.*	28+31	64.1
79	-	12.*	28+50	185.9
80	-	12.*	29+17	194.5
81	-	12.*	35+20	551.7
82	-	12.*	36+96	342.8

---

0 1 2 3 4 5 6 7

1

REC REC ID DNL PEOPLE LEQ(CAL)

```
  1  22          67.     500.    69.5
  2  23          67.     500.    67.2
  3  24          67.     500.    63.6
  4  25          67.     500.    66.5
  5  26          67.     500.    68.7
  6  27          67.     500.    64.2
  7  28 - K4     67.     500.    67.4
  8  29          67.     500.    68.0
  9  30          67.     500.    68.9
 10  R-3K-5 3    67.     500.    72.3
 11  32          67.     500.    69.0
 12  33          67.     500.    68.1
 13  34          67.     500.    69.2
 14  35          67.     500.    68.4
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.12.12.12.12.12.12.12.12.12.12.12.12.12.12.
 12.12.12.12.12.12.12.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (WESTBOUND) 14 FT. WALL

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*		24+33	69.4
42	-	0.*		24+85	34.5
43	-	0.*		24+85	68.2
44	-	0.*		25+00	69.4
45	-	0.*		25+20	44.9
46	-	0.*		26+40	132.3
47	-	0.*		26+80	100.7
48	-	0.*		27+10	85.0
49	-	0.*		27+10	90.2
50	-	0.*		27+40	63.1
51	-	0.*		27+60	30.9
52	-	0.*		27+60	126.5
53	-	0.*		28+00	10.2
54	-	0.*		28+00	98.1
55	-	0.*		28+65	66.2
56	-	0.*		28+85	62.3
57	-	0.*		29+19	183.2
58	-	0.*		35+20	540.9
59	-	0.*		36+85	49.3
60	-	0.*		37+00	196.7
61	-	0.*		37+60	217.0
62	-	14.*		21+58	62.4
63	-	14.*		21+65	311.0
64	-	14.*		22+60	133.4
65	-	14.*		23+00	183.4
66	-	14.*		23+55	216.0
67	-	14.*		24+20	67.9
68	-	14.*		24+40.5	50.2
69	-	14.*		24+65	53.1
70	-	14.*		24+70	231.2
71	-	14.*		25+40	58.5
72	-	14.*		25+91	31.3
73	-	14.*		26+00	359.9
74	-	14.*		27+10	94.9
75	-	14.*		27+40	42.7
76	-	14.*		27+60	126.3
77	-	14.*		28+00	98.4
78	-	14.*		28+31	64.1
79	-	14.*		28+50	185.9
80	-	14.*		29+17	194.5
81	-	14.*		35+20	551.7
82	-	14.*		36+96	342.8

---

0 1 2 3 4 5 6 7

1

REC REC ID DNL PEOPLE LEQ(CAL)

```
  1  22          67.     500.    69.1
  2  23          67.     500.    66.7
  3  24          67.     500.    63.3
  4  25          67.     500.    66.1
  5  26          67.     500.    67.8
  6  27          67.     500.    63.8
  7  28 - K4     67.     500.    67.2
  8  29          67.     500.    67.2
  9  30          67.     500.    67.5
 10  R-3K-5 3    67.     500.    71.1
 11  32          67.     500.    67.9
 12  33          67.     500.    67.3
 13  34          67.     500.    67.7
 14  35          67.     500.    67.1
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
 14.14.14.14.14.14.14.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION (WESTBOUND) 16 FT. WALL

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+55	36.3	
2	-	0.*							21+65	112.7	
3	-	0.*							22+00	65.9	
4	-	0.*							22+20	259.9	
5	-	0.*							23+00	321.3	
6	-	0.*							24+00	65.3	
7	-	0.*							24+20	85.5	
8	-	0.*							24+80	85.3	
9	-	0.*							24+80	64.9	
10	-	0.*							25+00	327.2	
11	-	0.*							26+00	262.4	
12	-	0.*							27+06	26.4	
13	-	0.*							27+12	93.8	
14	-	0.*							27+40	304.6	
15	-	0.*							28+31	9.4	
16	-	0.*							28+31	226.0	
17	-	0.*							29+00	317.5	
18	-	0.*							30+00	244.8	
19	-	0.*							30+75	34.2	
20	-	0.*							30+95	15.0	
21	-	0.*							30+95	18.0	
22	-	0.*							31+00	196.9	
23	-	0.*							31+60	84.3	
24	-	0.*							31+85	27.9	
25	-	0.*							31+92	89.5	
26	-	0.*							32+04	108.2	
27	-	0.*							32+15	22.0	
28	-	0.*							32+20	101.6	
29	-	0.*							32+50	119.7	
30	-	0.*							21+75	37.0	
31	-	0.*							21+80	66.5	
32	-	0.*							22+00	68.5	
33	-	0.*							22+20	292.3	
34	-	0.*							23+00	204.7	
35	-	0.*							23+55	87.2	
36	-	0.*							23+55	88.3	
37	-	0.*							23+80	24.6	
38	-	0.*							23+80	72.6	
39	-	0.*							24+00	83.4	
40	-	0.*							24+20	53.5	

41	-	0.*		24+33	69.4
42	-	0.*		24+85	34.5
43	-	0.*		24+85	68.2
44	-	0.*		25+00	69.4
45	-	0.*		25+20	44.9
46	-	0.*		26+40	132.3
47	-	0.*		26+80	100.7
48	-	0.*		27+10	85.0
49	-	0.*		27+10	90.2
50	-	0.*		27+40	63.1
51	-	0.*		27+60	30.9
52	-	0.*		27+60	126.5
53	-	0.*		28+00	10.2
54	-	0.*		28+00	98.1
55	-	0.*		28+65	66.2
56	-	0.*		28+85	62.3
57	-	0.*		29+19	183.2
58	-	0.*		35+20	540.9
59	-	0.*		36+85	49.3
60	-	0.*		37+00	196.7
61	-	0.*		37+60	217.0
62	-	16.*		21+58	62.4
63	-	16.*		21+65	311.0
64	-	16.*		22+60	133.4
65	-	16.*		23+00	183.4
66	-	16.*		23+55	216.0
67	-	16.*		24+20	67.9
68	-	16.*		24+40.5	50.2
69	-	16.*		24+65	53.1
70	-	16.*		24+70	231.2
71	-	16.*		25+40	58.5
72	-	16.*		25+91	31.3
73	-	16.*		26+00	359.9
74	-	16.*		27+10	94.9
75	-	16.*		27+40	42.7
76	-	16.*		27+60	126.3
77	-	16.*		28+00	98.4
78	-	16.*		28+31	64.1
79	-	16.*		28+50	185.9
80	-	16.*		29+17	194.5
81	-	16.*		35+20	551.7
82	-	16.*		36+96	342.8

---

0 1 2 3 4 5 6 7

1

REC REC ID DNL PEOPLE LEQ(CAL)

```
  1  22          67.     500.    68.0
  2  23          67.     500.    66.2
  3  24          67.     500.    63.1
  4  25          67.     500.    65.3
  5  26          67.     500.    67.0
  6  27          67.     500.    63.1
  7  28 - K4     67.     500.    66.8
  8  29          67.     500.    66.1
  9  30          67.     500.    65.9
 10  R-3K-5 3    67.     500.    70.2
 11  32          67.     500.    67.1
 12  33          67.     500.    66.7
 13  34          67.     500.    66.6
 14  35          67.     500.    66.0
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.16.16.16.16.16.16.16.16.16.16.16.16.16.
 16.16.16.16.16.16.16.
```

FUTURE WITH MITIGATION 8 FT. WALL (No Wrap-around) (Prt. 1)
T-ORTEGA HWY, 1
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
 942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
 942 , 55 , 79 , 55 , 237 , 55
L-LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132520,148,22+00
N,6137223.8,2132687,151,23+00
N,6137521.8,2132829,150.2,24+00
N,6137832.9,2132939,151,25+00
N,6138150.1,2133026,145.8,26+00
N,6138465.5,2133113,145.2,27+00
N,6138764.1,2133238,150.4,28+00
N,6139047,2133404,158,29+00
N,6139350,2133537,160.2,30+00
N,6139659,2133646,162.1,31+00
N,6139967.8,2133758,163.3,32+00
N,6140259.7,2133899,161.8,33+00
6140528,2134084,161.4,34+00
L-LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279,164.4,35+00
N,6141044.1,2134487,167.7,36+00
N,6141298,2134695,171.2,37+00
N,6141551.5,2134904,175.5,38+00
N,6141828.4,2135085,179.9,39+00
N,6142136.4,2135206,181.3,40+00
N,6142461.4,2135263,176.5,41+00
N,6142787.5,2135302,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359,174.1,44+00
N,6143765.3,2135403,183.7,45+00
N,6144088.6,2135458,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135630,239.8,48+00
6145034,2135720,259.2,
L-LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132352,144.8,21+20
N,6136834.8,2132412,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132657,151,23+00
N,6137535.3,2132797,149.9,24+00
N,6137843.1,2132905,151.1,25+00
N,6138159.4,2132992,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207,150.9,28+00
N,6139064.3,2133373,158.3,29+00
N,6139361.8,2133503,160.8,30+00
N,6139670.9,2133613,162.7,31+00
N,6139980.6,2133725,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134056,161.7,34+00

```
L-LANE 4 (EASTBOUND), 4
N,6140548.9,2134056,161.7,34+00
N,6140812.8,2134252,164.3,35+00
N,6141066.6,2134460,167.3,36+00
N,6141320.4,2134668,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053,179.1,39+00
N,6142145.7,2135172,178.5,40+00
N,6142465.7,2135227,176.7,41+00
N,6142791.7,2135267,173.8,42+00
N,6143117.6,2135298,170.4,43+00
N,6143445.1,2135324,173.9,44+00
N,6143771.1,2135368,183.7,45+00
N,6144094.5,2135423,201.1,46+00
N,6144416.2,2135497,220,47+00
N,6144729.4,2135596,241.7,48+00
6145039.6,2135703,259.5,49+00
B-HING NO., 1 , 1 , 0 ,0
6136796.3,2132601,177.2,177.2,21+75
6136827.1,2132580,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
6136925.8,2132670,182.3,182.3,22+20
6137111.5,2132894,211.6,211.6,23+00
6137266.2,2133028,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132972,196.9,196.9,23+80
6137395.9,2132951,187,187,23+80
6137468.7,2132954,187,187,24+00
6137549.9,2132942,173.9,173.9,24+20
B-, 2 , 1 , 0 ,0
6137549.9,2132942,173.9,173.9,24+20
6137580.4,2132986,173.9,173.9,24+33
6137573.7,2133055,170.6,170.6,24+40
B-, 3 , 1 , 0 ,0
6137718.2,2133135,177.2,177.2,24+85
6137728,2133102,178.8,178.8,24+85
6137791.6,2133077,178.8,178.8,25+00
6137859.5,2133091,180.4,180.4,25+20
6137847,2133134,183.7,183.7,25+20
B-, 4 , 1 , 0 ,0
6138243.6,2133180,196.9,196.9,26+40
6138367.7,2133226,196.9,196.9,26+80
6138445,2133290,203.4,203.4,27+10
6138468.8,2133214,173.9,173.9,27+10
6138556.9,2133233,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133219,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276,157.5,157.5,28+00
6138829.2,2133324,157.5,157.5,28+31
B-, 5 , 1 , 0 ,0
6138914.9,2133397,164,164,28+65
6138974.9,2133425,164,164,28+85
6139005.9,2133479,164,164,29+00
B-, 6 , 1 , 0 ,0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133557,161.2,161.2,29+73
B-, 7 , 1 , 0 ,0
6140809.2,2134361,178,178,35+20
6141228.1,2134703,178.3,178.3,36+85
```

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6141265.6,2134735,178.1,178.1,37+00
6141419.1,2134858,179.6,179.6,37+60
6141495.3,2135061,184.7,184.7,38+00
B-BARRIER NO.1 EB 8 FT, 8 , 2 , 0 ,0
6136876.4,2132409,147.3,155.3,21+65
6137029.,2132502,149.3,157.3,22+20
6137254.3,2132632,151,159,23+00
6137378.5,2132694,151.4,159.4,23+43
6137515.8,2132756,150.3,158.3,23+90
6137663.9,2132814,151.2,159.2,23+39
6137696.8,2132799,149.3,157.3,24+47
B-BARRIER NO.4 EB 8 FT, 9 , 2 , 0 ,0
6139668.3,2133554,162.4,170.4,30+93
6139668.8,2133565,162.4,170.4,30+95
6139683.8,2133575,162.4,170.4,31+00
6139869.6,2133641,163.2,171.2,31+60
6139949,2133669,163.1,171.1,31+85
6139976,2133662,163.1,171.1,31+92
B-BARRIER NO. 3 EB 8 FT, 10 , 2 , 0 ,0
6138525.3,2133059,146,154,27+12
6138612.7,2133094,147.5,155.5,27+40
6138794.7,2133182,151.1,159.1,28+00
6138889.,2133224,153.3,161.3,28+31
6139084.1,2133338,159.1,167.1,29+00
6139226.6,2133407,160.8,168.8,29+50
6139375.1,2133465,161.4,169.4,30+00
6139601.,2133545,164,172,30+73
6139610.8,2133542,164,172,30+76
6139616.,2133535,164,172,30+76.5
B-BARRIER NO. 5 EB 8FT, 11 , 2 , 0 ,0
6140044.9,2133687,159.1,167.1,32+13.5
6140044.8,2133695,160.8,168.8,32+15
6140056.1,2133714,163.2,171.2,32+20
6140148.6,2133756,163.4,171.4,32+50
6140245.4,2133807,162.4,170.4,32+82
6140245.9,2133817,162.4,170.4,32+84
6140298.5,2133833,154,162,33+00
6140341.5,2133860,153.5,161.5,33+15
6140380.3,2133885,154,162,33+29
B-BARRIER NO.2 EB 8FT, 12 , 2 , 0 ,0
6137752.5,2132819,149.3,157.3,24+65
6137768.3,2132851,152.2,160.2,24+73
6137975.7,2132915,150.8,158.8,25+40
6138167.9,2132960,147.7,155.7,26+00
6138293.2,2132991,145.7,153.7,26+40
6138416.7,2133023,145.4,153.4,26+78
B-BARRIER NO.6 EB 8 FT, 13 , 2 , 0 ,0
6140930.6,2134305,161.2,169.2,35+38
6141146.1,2134482,163.7,171.7,36+23
B-BARRIER NO. 6A, 14 , 2 , 0 ,0
6141176.2,2134507,164.9,172.9,36+35
6141298.4,2134607,166.4,174.4,36+53
R, 1 , 67 ,500
6136970,2132449.2,152.4,1
R, 2 , 67 ,500
6136991.5,2132360.3,148.4,1A
R, 3 , 67 ,500
6137060.9,2132449.2,133.7,2
R, 4 , 67 ,500
6137047.8,2132407.7,133.7,2A
```

R, 5 , 67 ,500
6137229.8,2132406.1,132.4,3A
R, 6 , 67 ,500
6137379.1,2132641.5,137.5,R-2 K-1
R, 7 , 67 ,500
6137518.9,2132707.2,137.5,4
R, 8 , 67 ,500
6137566.6,2132563.2,135.3,4A
R, 9 , 67 ,500
6137587.4,2132731.3,136.2,5
R, 10 , 67 ,500
6137859.2,2132833.9,150.1,6
R, 11 , 67 ,500
6137828.6,2132673.3,149.0,6A
R, 12 , 67 ,500
6137974.3,2132873.4,150.4,7
R, 13 , 67 ,500
6138025,2132704.6,150.7,7A
R, 14 , 67 ,500
6138067.9,2132884.8,140.4,8
R, 15 , 67 ,500
6138084.3,2132804.3,138.8,8A
R, 16 , 67 ,500
6138278.1,2132920.4,140.3,9
R, 17 , 67 ,500
6138335.8,2132957.1,145.6,10
R, 18 , 67 ,500
6138351.6,2132878.4,143.3,10A
R, 19 , 67 ,500
6138591.3,2133051.6,149.1,11
R, 20 , 67 ,500
6138595.7,2132953.6,143.7,11A
R, 21 , 67 ,500
6138827.7,2133087.7,140.8,12
R, 22 , 67 ,500
6138943.9,2133222.9,152.1,13
R, 23 , 67 ,500
6138915.9,2133073.7,151.4,13A
R, 24 , 67 ,500
6139115.1,2133310.9,155.5,14
R, 25 , 67 ,500
6139110.8,2133065,154.2,14A
R, 26 , 67 ,500
6139170.8,2133347.1,156,R-1
R, 27 , 67 ,500
6139315.3,2133417,157.2,15
R, 28 , 67 ,500
6139380.7,2133157.7,157.5,15A
R, 29 , 67 ,500
6139385.9,2133429.5,157.8,16 K3 A1
R, 30 , 67 ,500
6139527.4,2133264.5,158.5,16A
R, 31 , 67 ,500
6139497.5,2133469.1,159.9,17
R, 32 , 67 ,500
6139760.4,2133498.1,166.9,17A
R, 33 , 67 ,500
6139754.1,2133573.5,162,18
R, 34 , 67 ,500
6139849.1,2133516.9,157.2,18A

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R, 35 , 67 ,500
6139916.6,2133630.9,160.1,19
R, 36 , 67 ,500
6140248.5,2133582.6,160.3,19A
R, 37 , 67 ,500
6140101.9,2133708.7,161.3,20
R, 38 , 67 ,500
6140181.3,2133741.7,161.2,21
R, 39 , 67 ,500
6141145.5,2134412.4,167.4,21 M
R, 40 , 67 ,500
6141351.5,2134492.4,168.2,21N
D, 4.5
ALL,ALL
K,-2
ALL,1,3,6,7,9,10,12
K,-2
ALL,14,16,17,19,21,22,24
K,-2
ALL,26,27,29,31,33,35,37
K,-2
ALL,38,39,40
K,-9
ALL,2,4,5,8,11,13,15
K,-9
ALL,18,20,23,25,28,30
K,-9
ALL,32,34,36
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION 8 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	8.*							21+65	178.6	
34	-	8.*							22+20	260.3	
35	-	8.*							23+00	138.6	
36	-	8.*							23+43	150.8	
37	-	8.*							23+90	159.0	
38	-	8.*							23+39	36.3	

39	-	8.*		30+93	11.0
40	-	8.*		30+95	18.0
41	-	8.*		31+00	196.9
42	-	8.*		31+60	84.3
43	-	8.*		31+85	27.9
44	-	8.*		27+12	93.8
45	-	8.*		27+40	202.2
46	-	8.*		28+00	103.4
47	-	8.*		28+31	226.0
48	-	8.*		29+00	158.3
49	-	8.*		29+50	159.4
50	-	8.*		30+00	239.8
51	-	8.*		30+73	10.4
52	-	8.*		30+76	8.6
53	-	8.*		32+13.5	8.2
54	-	8.*		32+15	22.1
55	-	8.*		32+20	101.6
56	-	8.*		32+50	109.6
57	-	8.*		32+82	10.0
58	-	8.*		32+84	55.5
59	-	8.*		33+00	50.8
60	-	8.*		33+15	46.3
61	-	8.*		24+65	35.9
62	-	8.*		24+73	216.7
63	-	8.*		25+40	197.7
64	-	8.*		26+00	128.8
65	-	8.*		26+40	127.6
66	-	8.*		35+38	278.9
67	-	8.*		36+35	158.1

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	68.0
2	1A	67.	500.	59.2
3	2	67.	500.	62.1
4	2A	67.	500.	56.0
5	3A	67.	500.	54.4
6	R-2 K-1	67.	500.	61.1
7	4	67.	500.	61.1
8	4A	67.	500.	54.4
9	5	67.	500.	60.7
10	6	67.	500.	64.8
11	6A	67.	500.	56.6
12	7	67.	500.	65.3
13	7A	67.	500.	55.7
14	8	67.	500.	62.2
15	8A	67.	500.	55.3
16	9	67.	500.	64.0
17	10	67.	500.	66.2
18	10A	67.	500.	57.9
19	11	67.	500.	67.1
20	11A	67.	500.	58.4

```
 21  12          67.     500.    62.4
 22  13          67.     500.    63.4
 23  13A         67.     500.    56.7
 24  14          67.     500.    63.1
 25  14A         67.     500.    54.9
 26  R-1         67.     500.    62.7
 27  15          67.     500.    62.2
 28  15A         67.     500.    54.2
 29  16 K3 A1    67.     500.    62.9
 30  16A         67.     500.    54.9
 31  17          67.     500.    63.1
 32  17A         67.     500.    59.1
 33  18          67.     500.    63.9
 34  18A         67.     500.    56.5
 35  19          67.     500.    62.2
 36  19A         67.     500.    56.3
 37  20          67.     500.    62.5
 38  21          67.     500.    63.5
 39  21 M        67.     500.    69.1
 40  21N         67.     500.    67.3
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
8.
  8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
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SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 10 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	BARRIER HEIGHTS 1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	10.*							21+65	178.6	
34	-	10.*							22+20	260.3	
35	-	10.*							23+00	138.6	
36	-	10.*							23+43	150.8	
37	-	10.*							23+90	159.0	
38	-	10.*							23+39	36.3	

39	-	10.*		24+65	35.9
40	-	10.*		24+73	216.7
41	-	10.*		25+40	197.7
42	-	10.*		26+00	128.8
43	-	10.*		26+40	127.6
44	-	10.*		27+12	93.8
45	-	10.*		27+40	202.2
46	-	10.*		28+00	103.4
47	-	10.*		28+31	226.0
48	-	10.*		29+00	158.3
49	-	10.*		29+50	159.4
50	-	10.*		30+00	239.8
51	-	10.*		30+73	10.4
52	-	10.*		30+76	8.6
53	-	10.*		30+93	11.0
54	-	10.*		30+95	18.0
55	-	10.*		31+00	196.9
56	-	10.*		31+60	84.3
57	-	10.*		31+85	27.9
58	-	10.*		32+13.5	8.2
59	-	10.*		32+15	22.1
60	-	10.*		32+20	101.6
61	-	10.*		32+50	109.6
62	-	10.*		32+82	10.0
63	-	10.*		32+84	55.5
64	-	10.*		33+00	50.8
65	-	10.*		33+15	46.3
66	-	10.*		35+38	278.9
67	-	10.*		35+38	278.9

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0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	65.5
2	1A	67.	500.	58.3
3	2	67.	500.	61.2
4	2A	67.	500.	55.2
5	3A	67.	500.	53.0
6	R-2 K-1	67.	500.	59.8
7	4	67.	500.	59.8
8	4A	67.	500.	53.0
9	5	67.	500.	59.4
10	6	67.	500.	63.1
11	6A	67.	500.	55.5
12	7	67.	500.	63.5
13	7A	67.	500.	54.6
14	8	67.	500.	60.7
15	8A	67.	500.	53.9
16	9	67.	500.	62.6
17	10	67.	500.	64.7
18	10A	67.	500.	56.8
19	11	67.	500.	65.7
20	11A	67.	500.	57.7

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 21  12          67.     500.    60.9
 22  13          67.     500.    61.8
 23  13A         67.     500.    55.2
 24  14          67.     500.    61.6
 25  14A         67.     500.    53.6
 26  R-1         67.     500.    61.1
 27  15          67.     500.    60.7
 28  15A         67.     500.    53.0
 29  16 K3 A1    67.     500.    61.3
 30  16A         67.     500.    53.7
 31  17          67.     500.    61.5
 32  17A         67.     500.    58.0
 33  18          67.     500.    62.1
 34  18A         67.     500.    55.2
 35  19          67.     500.    60.6
 36  19A         67.     500.    55.6
 37  20          67.     500.    60.8
 38  21          67.     500.    62.0
 39  21 M        67.     500.    68.7
 40  21N         67.     500.    68.1
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
 10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 12 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							24+20	53.5	
2	-	0.*							24+33	69.4	
3	-	0.*							24+85	34.5	
4	-	0.*							24+85	68.2	
5	-	0.*							25+00	69.4	
6	-	0.*							25+20	44.9	
7	-	0.*							26+40	132.3	
8	-	0.*							26+80	100.7	
9	-	0.*							27+10	85.0	
10	-	0.*							27+10	90.2	
11	-	0.*							27+40	63.1	
12	-	0.*							27+60	30.9	
13	-	0.*							27+60	126.5	
14	-	0.*							28+00	10.2	
15	-	0.*							28+00	98.1	
16	-	0.*							28+65	66.2	
17	-	0.*							28+85	62.3	
18	-	0.*							29+19	183.2	
19	-	0.*							35+20	540.9	
20	-	0.*							36+85	49.3	
21	-	0.*							37+00	196.7	
22	-	0.*							37+60	217.0	
23	-	12.*							21+65	178.6	
24	-	12.*							22+20	260.3	
25	-	12.*							23+00	138.6	
26	-	12.*							23+43	150.8	
27	-	12.*							23+90	159.0	
28	-	12.*							23+39	36.3	
29	-	12.*							24+65	35.9	
30	-	12.*							24+73	216.7	
31	-	12.*							25+40	197.7	
32	-	12.*							26+00	128.8	
33	-	12.*							26+40	127.6	
34	-	12.*							27+12	93.8	
35	-	12.*							27+40	202.2	
36	-	12.*							28+00	103.4	
37	-	12.*							28+31	226.0	
38	-	12.*							29+00	158.3	

39	-	12.*		29+50	159.4
40	-	12.*		30+00	239.8
41	-	12.*		30+73	10.4
42	-	12.*		30+76	8.6
43	-	12.*		30+93	11.0
44	-	12.*		30+95	18.0
45	-	12.*		31+00	196.9
46	-	12.*		31+60	84.3
47	-	12.*		31+85	27.9
48	-	12.*		32+13.5	8.2
49	-	12.*		32+15	22.1
50	-	12.*		32+20	101.6
51	-	12.*		32+50	109.6
52	-	12.*		32+82	10.0
53	-	12.*		32+84	55.5
54	-	12.*		33+00	50.8
55	-	12.*		33+15	46.3
56	-	12.*		35+38	278.9
57	-	12.*		36+35	158.1

---

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	63.6
2	1A	67.	500.	57.6
3	2	67.	500.	60.6
4	2A	67.	500.	54.6
5	3A	67.	500.	52.0
6	R-2 K-1	67.	500.	58.8
7	4	67.	500.	58.7
8	4A	67.	500.	51.8
9	5	67.	500.	58.4
10	6	67.	500.	61.5
11	6A	67.	500.	54.6
12	7	67.	500.	61.9
13	7A	67.	500.	53.3
14	8	67.	500.	59.4
15	8A	67.	500.	52.7
16	9	67.	500.	61.6
17	10	67.	500.	63.6
18	10A	67.	500.	55.8
19	11	67.	500.	64.7
20	11A	67.	500.	57.1
21	12	67.	500.	59.7
22	13	67.	500.	60.4
23	13A	67.	500.	53.8
24	14	67.	500.	60.2
25	14A	67.	500.	52.3
26	R-1	67.	500.	59.8
27	15	67.	500.	59.5
28	15A	67.	500.	51.7
29	16 K3 A1	67.	500.	59.9
30	16A	67.	500.	52.5
31	17	67.	500.	60.1

```
 32  17A        67.     500.    56.8
 33  18         67.     500.    60.5
 34  18A        67.     500.    54.1
 35  19         67.     500.    59.2
 36  19A        67.     500.    54.8
 37  20         67.     500.    59.3
 38  21         67.     500.    60.7
 39  21 M       67.     500.    67.2
 40  21N        67.     500.    66.4
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.12.12.12.

12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.
 12.12.12.12.12.12.12.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	BARRIER HEIGHTS 1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	14.*							21+65	178.6	
34	-	14.*							22+20	260.3	
35	-	14.*							23+00	138.6	
36	-	14.*							23+43	150.8	
37	-	14.*							23+90	159.0	
38	-	14.*							23+39	36.3	

39	-	14.*		24+65	35.9
40	-	14.*		24+73	216.7
41	-	14.*		25+40	197.7
42	-	14.*		26+00	128.8
43	-	14.*		26+40	127.6
44	-	14.*		27+12	93.8
45	-	14.*		27+40	202.2
46	-	14.*		28+00	103.4
47	-	14.*		28+31	226.0
48	-	14.*		29+00	158.3
49	-	14.*		29+50	159.4
50	-	14.*		30+00	239.8
51	-	14.*		30+73	10.4
52	-	14.*		30+76	8.6
53	-	14.*		30+93	11.0
54	-	14.*		30+95	18.0
55	-	14.*		31+00	196.9
56	-	14.*		31+60	84.3
57	-	14.*		31+85	27.9
58	-	14.*		32+13.5	8.2
59	-	14.*		32+15	22.1
60	-	14.*		32+20	101.6
61	-	14.*		32+50	109.6
62	-	14.*		32+82	10.0
63	-	14.*		32+84	55.5
64	-	14.*		33+00	50.8
65	-	14.*		33+15	46.3
66	-	14.*		35+38	278.9
67	-	14.*		36+35	158.1

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	62.2
2	1A	67.	500.	57.1
3	2	67.	500.	60.1
4	2A	67.	500.	54.2
5	3A	67.	500.	51.3
6	R-2 K-1	67.	500.	57.9
7	4	67.	500.	57.7
8	4A	67.	500.	50.9
9	5	67.	500.	57.5
10	6	67.	500.	60.2
11	6A	67.	500.	53.8
12	7	67.	500.	60.5
13	7A	67.	500.	52.2
14	8	67.	500.	58.3
15	8A	67.	500.	51.7
16	9	67.	500.	60.8
17	10	67.	500.	62.8
18	10A	67.	500.	55.0
19	11	67.	500.	64.0
20	11A	67.	500.	56.6

```
 21  12          67.     500.    58.7
 22  13          67.     500.    59.2
 23  13A         67.     500.    52.5
 24  14          67.     500.    59.0
 25  14A         67.     500.    51.1
 26  R-1         67.     500.    58.7
 27  15          67.     500.    58.5
 28  15A         67.     500.    50.6
 29  16 K3 A1    67.     500.    58.8
 30  16A         67.     500.    51.5
 31  17          67.     500.    58.9
 32  17A         67.     500.    55.8
 33  18          67.     500.    59.2
 34  18A         67.     500.    53.2
 35  19          67.     500.    58.1
 36  19A         67.     500.    54.2
 37  20          67.     500.    58.1
 38  21          67.     500.    59.5
 39  21 M        67.     500.    66.1
 40  21N         67.     500.    66.0
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
 14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT and 16 FT. (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	BARRIER HEIGHTS 1	2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	16.*							21+65	178.6	
34	-	16.*							22+20	260.3	
35	-	16.*							23+00	138.6	
36	-	16.*							23+43	150.8	
37	-	16.*							23+90	159.0	
38	-	16.*							23+39	36.3	

39	-	16.*		24+65	35.9
40	-	16.*		24+73	216.7
41	-	16.*		25+40	197.7
42	-	16.*		26+00	128.8
43	-	16.*		26+40	127.6
44	-	14.*		27+12	93.8
45	-	14.*		27+40	202.2
46	-	15.*		28+00	103.5
47	-	15.*		28+31	67.2
48	-	15.*		28+43	2.0
49	-	16.*		28+43	158.8
50	-	16.*		29+00	158.3
51	-	16.*		29+50	159.4
52	-	16.*		30+00	239.8
53	-	16.*		30+73	10.4
54	-	16.*		30+76	8.6
55	-	16.*		30+93	11.0
56	-	16.*		30+95	18.0
57	-	16.*		31+00	196.9
58	-	16.*		31+60	84.3
59	-	16.*		31+85	27.9
60	-	16.*		32+13.5	8.2
61	-	16.*		32+15	22.1
62	-	16.*		32+20	101.6
63	-	16.*		32+50	109.6
64	-	16.*		32+82	10.0
65	-	16.*		32+84	55.5
66	-	16.*		33+00	50.8
67	-	16.*		33+15	46.3
68	-	16.*		35+38	278.9
69	-	16.*		36+35	158.1

---

0 1 2 3 4 5 6 7

1

REC	REC ID	DNL	PEOPLE	LEQ(CAL)
1	1	67.	500.	61.3
2	1A	67.	500.	56.8
3	2	67.	500.	59.8
4	2A	67.	500.	54.0
5	3A	67.	500.	50.8
6	R-2 K-1	67.	500.	57.3
7	4	67.	500.	57.1
8	4A	67.	500.	50.2
9	5	67.	500.	56.8
10	6	67.	500.	59.1
11	6A	67.	500.	53.3
12	7	67.	500.	59.3
13	7A	67.	500.	51.4
14	8	67.	500.	57.4
15	8A	67.	500.	50.9
16	9	67.	500.	60.2
17	10	67.	500.	62.2

```
 18  10A        67.     500.    54.5
 19  11         67.     500.    63.9
 20  11A        67.     500.    56.4
 21  12         67.     500.    58.4
 22  13         67.     500.    58.5
 23  13A        67.     500.    52.0
 24  14         67.     500.    58.0
 25  14A        67.     500.    50.3
 26  R-1        67.     500.    57.8
 27  15         67.     500.    57.8
 28  15A        67.     500.    49.8
 29  16 K3 A1   67.     500.    57.8
 30  16A        67.     500.    50.8
 31  17         67.     500.    57.9
 32  17A        67.     500.    55.0
 33  18         67.     500.    58.1
 34  18A        67.     500.    52.5
 35  19         67.     500.    57.3
 36  19A        67.     500.    53.7
 37  20         67.     500.    57.2
 38  21         67.     500.    58.5
 39  21 M       67.     500.    65.3
 40  21N        67.     500.    65.7
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.16.16.16.16.16.16.16.16.16.16.14.14.15.15.15.16.16.
 16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.
```

FUTURE WITH MITIGATION 8 FT. WALL (No Wrap-around) (Prt.2)
T-ORTEGA HWY, 1
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 2
 1913 , 55 , 131 , 55 , 144 , 55
T-ORTEGA HWY, 3
 942 , 55 , 79 , 55 , 237 , 55
T-ORTEGA HWY, 4
 942 , 55 , 79 , 55 , 237 , 55
L-LANE 1 (WESTBOUND), 1
N,6136378.7,2132174.9,143.8,20+00
N,6136717.7,2132382,144.8,21+20
N,6136815.8,2132443,146.5,21+55
N,6136941.1,2132520,148,22+00
N,6137223.8,2132687,151,23+00
N,6137521.8,2132829,150.2,24+00
N,6137832.9,2132939,151,25+00
N,6138150.1,2133026,145.8,26+00
N,6138465.5,2133113,145.2,27+00
N,6138764.1,2133238,150.4,28+00
N,6139047,2133404,158,29+00
N,6139350,2133537,160.2,30+00
N,6139659,2133646,162.1,31+00
N,6139967.8,2133758,163.3,32+00
N,6140259.7,2133899,161.8,33+00
6140528,2134084,161.4,34+00
L-LANE 2 (WESTBOUND), 2
N,6140528,2134084,161.4,34+00
N,6140790.6,2134279,164.4,35+00
N,6141044.1,2134487,167.7,36+00
N,6141298,2134695,171.2,37+00
N,6141551.5,2134904,175.5,38+00
N,6141828.4,2135085,179.9,39+00
N,6142136.4,2135206,181.3,40+00
N,6142461.4,2135263,176.5,41+00
N,6142787.5,2135302,173.9,42+00
N,6143114.8,2135333,170.3,43+00
N,6143442.1,2135359,174.1,44+00
N,6143765.3,2135403,183.7,45+00
N,6144088.6,2135458,200.5,46+00
N,6144406.5,2135531,219.8,47+00
N,6144718.5,2135630,239.8,48+00
6145034,2135720,259.2,
L-LANE 3 (EASTBOUND), 3
N,6136398.1,2132144,143.8,20+00
N,6136736.4,2132352,144.8,21+20
N,6136834.8,2132412,146.5,21+55
N,6136959.8,2132489,148,22+00
N,6137241.1,2132657,151,23+00
N,6137535.3,2132797,149.9,24+00
N,6137843.1,2132905,151.1,25+00
N,6138159.4,2132992,147.6,26+00
N,6138475.9,2133079,145.7,27+00
N,6138781.1,2133207,150.9,28+00
N,6139064.3,2133373,158.3,29+00
N,6139361.8,2133503,160.8,30+00
N,6139670.9,2133613,162.7,31+00
N,6139980.6,2133725,163.7,32+00
N,6140277.8,2133868,161.9,33+00
N,6140548.9,2134056,161.7,34+00

```
L-LANE 4 (EASTBOUND), 4
N,6140548.9,2134056,161.7,34+00
N,6140812.8,2134252,164.3,35+00
N,6141066.6,2134460,167.3,36+00
N,6141320.4,2134668,171.2,37+00
N,6141573.9,2134876,175.7,38+00
N,6141844.6,2135053,179.1,39+00
N,6142145.7,2135172,178.5,40+00
N,6142465.7,2135227,176.7,41+00
N,6142791.7,2135267,173.8,42+00
N,6143117.6,2135298,170.4,43+00
N,6143445.1,2135324,173.9,44+00
N,6143771.1,2135368,183.7,45+00
N,6144094.5,2135423,201.1,46+00
N,6144416.2,2135497,220,47+00
N,6144729.4,2135596,241.7,48+00
6145039.6,2135703,259.5,49+00
B-HING NO., 1 , 1 , 0 ,0
6136796.3,2132601,177.2,177.2,21+75
6136827.1,2132580,177.2,177.2,21+80
6136881.3,2132618,178.8,178.8,22+00
6136925.8,2132670,182.3,182.3,22+20
6137111.5,2132894,211.6,211.6,23+00
6137266.2,2133028,219.8,219.8,23+55
6137301.8,2132952,196.9,196.9,23+55
6137388,2132972,196.9,196.9,23+80
6137395.9,2132951,187,187,23+80
6137468.7,2132954,187,187,24+00
6137549.9,2132942,173.9,173.9,24+20
B-, 2 , 1 , 0 ,0
6137549.9,2132942,173.9,173.9,24+20
6137580.4,2132986,173.9,173.9,24+33
6137573.7,2133055,170.6,170.6,24+40
B-, 3 , 1 , 0 ,0
6137718.2,2133135,177.2,177.2,24+85
6137728,2133102,178.8,178.8,24+85
6137791.6,2133077,178.8,178.8,25+00
6137859.5,2133091,180.4,180.4,25+20
6137847,2133134,183.7,183.7,25+20
B-, 4 , 1 , 0 ,0
6138243.6,2133180,196.9,196.9,26+40
6138367.7,2133226,196.9,196.9,26+80
6138445,2133290,203.4,203.4,27+10
6138468.8,2133214,173.9,173.9,27+10
6138556.9,2133233,169,169,27+40
6138618.7,2133246,164,164,27+60
6138631.2,2133219,155.8,155.8,27+60
6138748.1,2133267,155.8,155.8,28+00
6138743.4,2133276,157.5,157.5,28+00
6138829.2,2133324,157.5,157.5,28+31
B-, 5 , 1 , 0 ,0
6138914.9,2133397,164,164,28+65
6138974.9,2133425,164,164,28+85
6139005.9,2133479,164,164,29+00
B-, 6 , 1 , 0 ,0
6139085.6,2133466,161.2,161.2,29+19
6139244.7,2133557,161.2,161.2,29+73
B-, 7 , 1 , 0 ,0
6140809.2,2134361,178,178,35+20
6141228.1,2134703,178.3,178.3,36+85
```

```
6141265.6,2134735,178.1,178.1,37+00
6141419.1,2134858,179.6,179.6,37+60
6141495.3,2135061,184.7,184.7,38+00
B-BARRIER NO.1 EB 8 FT, 8 , 2 , 0 ,0
6136876.4,2132409,147.3,155.3,21+65
6137029.,2132502,149.3,157.3,22+20
6137254.3,2132632,151,159,23+00
6137378.5,2132694,151.4,159.4,23+43
6137515.8,2132756,150.3,158.3,23+90
6137663.9,2132814,151.2,159.2,23+39
6137696.8,2132799,149.3,157.3,24+47
B-BARRIER NO.4 EB 8 FT, 9 , 2 , 0 ,0
6139668.3,2133554,162.4,170.4,30+93
6139668.8,2133565,162.4,170.4,30+95
6139683.8,2133575,162.4,170.4,31+00
6139869.6,2133641,163.2,171.2,31+60
6139949,2133669,163.1,171.1,31+85
6139976,2133662,163.1,171.1,31+92
B-BARRIER NO. 3 EB 8 FT, 10 , 2 , 0 ,0
6138525.3,2133059,146,154,27+12
6138612.7,2133094,147.5,155.5,27+40
6138794.7,2133182,151.1,159.1,28+00
6138889.,2133224,153.3,161.3,28+31
6139084.1,2133338,159.1,167.1,29+00
6139226.6,2133407,160.8,168.8,29+50
6139375.1,2133465,161.4,169.4,30+00
6139601.,2133545,164,172,30+73
6139610.8,2133542,164,172,30+76
6139616.,2133535,164,172,30+76.5
B-BARRIER NO. 5 EB 8FT, 11 , 2 , 0 ,0
6140044.9,2133687,159.1,167.1,32+13.5
6140044.8,2133695,160.8,168.8,32+15
6140056.1,2133714,163.2,171.2,32+20
6140148.6,2133756,163.4,171.4,32+50
6140245.4,2133807,162.4,170.4,32+82
6140245.9,2133817,162.4,170.4,32+84
6140298.5,2133833,154,162,33+00
6140341.5,2133860,153.5,161.5,33+15
6140380.3,2133885,154,162,33+29
B-BARRIER NO.2 EB 8FT, 12 , 2 , 0 ,0
6137752.5,2132819,149.3,157.3,24+65
6137768.3,2132851,152.2,160.2,24+73
6137975.7,2132915,150.8,158.8,25+40
6138167.9,2132960,147.7,155.7,26+00
6138293.2,2132991,145.7,153.7,26+40
6138416.7,2133023,145.4,153.4,26+78
B-BARRIER NO.6 EB 8 FT, 13 , 2 , 0 ,0
6140930.6,2134305,161.2,169.2,35+38
6141146.1,2134482,163.7,171.7,36+23
B-BARRIER NO. 6A, 14 , 2 , 0 ,0
6141176.2,2134507,164.9,172.9,36+35
6141298.4,2134607,166.4,174.4,36+53
R, 1 , 67 ,500
6139611.9,2133483.2,160.2,17B
R, 2 , 67 ,500
6137033.8,2132347.8,132.6,2B
R, 3 , 67 ,500
6137672.9,2132677.8,136.6,5B
D, 4.5
ALL,ALL
```

```
K,-2
ALL,1,3
K,-9
ALL,2
C,C
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION 8 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	8.*							21+65	178.6	
34	-	8.*							22+20	260.3	
35	-	8.*							23+00	138.6	
36	-	8.*							23+43	150.8	
37	-	8.*							23+90	159.0	
38	-	8.*							23+39	36.3	

```
 39      -    8.*                                    30+93        11.0
 40      -    8.*                                    30+95        18.0
 41      -    8.*                                    31+00       196.9
 42      -    8.*                                    31+60        84.3
 43      -    8.*                                    31+85        27.9

 44      -    8.*                                    27+12        93.8
 45      -    8.*                                    27+40       202.2
 46      -    8.*                                    28+00       103.4
 47      -    8.*                                    28+31       226.0
 48      -    8.*                                    29+00       158.3
 49      -    8.*                                    29+50       159.4
 50      -    8.*                                    30+00       239.8
 51      -    8.*                                    30+73        10.4
 52      -    8.*                                    30+76         8.6

 53      -    8.*                                    32+13.5       8.2
 54      -    8.*                                    32+15        22.1
 55      -    8.*                                    32+20       101.6
 56      -    8.*                                    32+50       109.6
 57      -    8.*                                    32+82        10.0
 58      -    8.*                                    32+84        55.5
 59      -    8.*                                    33+00        50.8
 60      -    8.*                                    33+15        46.3

 61      -    8.*                                    24+65        35.9
 62      -    8.*                                    24+73       216.7
 63      -    8.*                                    25+40       197.7
 64      -    8.*                                    26+00       128.8
 65      -    8.*                                    26+40       127.6

 66      -    8.*                                    35+38       278.9

 67      -    8.*                                    36+35       158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL   PEOPLE    LEQ(CAL)
 ---------------------------------
  1  17B        67.     500.    66.3
  2  2B         67.     500.    56.5
  3  5B         67.     500.    63.1
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0. 0. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
8.
  8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8. 8.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 10 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	10.*							21+65	178.6	
34	-	10.*							22+20	260.3	
35	-	10.*							23+00	138.6	
36	-	10.*							23+43	150.8	
37	-	10.*							23+90	159.0	
38	-	10.*							23+39	36.3	

```
 39      -  10.*                                        24+65       35.9
 40      -  10.*                                        24+73      216.7
 41      -  10.*                                        25+40      197.7
 42      -  10.*                                        26+00      128.8
 43      -  10.*                                        26+40      127.6

 44      -  10.*                                        27+12       93.8
 45      -  10.*                                        27+40      202.2
 46      -  10.*                                        28+00      103.4
 47      -  10.*                                        28+31      226.0
 48      -  10.*                                        29+00      158.3
 49      -  10.*                                        29+50      159.4
 50      -  10.*                                        30+00      239.8
 51      -  10.*                                        30+73       10.4
 52      -  10.*                                        30+76        8.6

 53      -  10.*                                        30+93       11.0
 54      -  10.*                                        30+95       18.0
 55      -  10.*                                        31+00      196.9
 56      -  10.*                                        31+60       84.3
 57      -  10.*                                        31+85       27.9

 58      -  10.*                                        32+13.5      8.2
 59      -  10.*                                        32+15       22.1
 60      -  10.*                                        32+20      101.6
 61      -  10.*                                        32+50      109.6
 62      -  10.*                                        32+82       10.0
 63      -  10.*                                        32+84       55.5
 64      -  10.*                                        33+00       50.8
 65      -  10.*                                        33+15       46.3

 66      -  10.*                                        35+38      278.9

 67      -  10.*                                        35+38      278.9
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID    DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B       67.    500.   65.7
  2  2B        67.    500.   55.8
  3  5B        67.    500.   62.2
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
 10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.10.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 12 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							24+20	53.5	
2	-	0.*							24+33	69.4	
3	-	0.*							24+85	34.5	
4	-	0.*							24+85	68.2	
5	-	0.*							25+00	69.4	
6	-	0.*							25+20	44.9	
7	-	0.*							26+40	132.3	
8	-	0.*							26+80	100.7	
9	-	0.*							27+10	85.0	
10	-	0.*							27+10	90.2	
11	-	0.*							27+40	63.1	
12	-	0.*							27+60	30.9	
13	-	0.*							27+60	126.5	
14	-	0.*							28+00	10.2	
15	-	0.*							28+00	98.1	
16	-	0.*							28+65	66.2	
17	-	0.*							28+85	62.3	
18	-	0.*							29+19	183.2	
19	-	0.*							35+20	540.9	
20	-	0.*							36+85	49.3	
21	-	0.*							37+00	196.7	
22	-	0.*							37+60	217.0	
23	-	12.*							21+65	178.6	
24	-	12.*							22+20	260.3	
25	-	12.*							23+00	138.6	
26	-	12.*							23+43	150.8	
27	-	12.*							23+90	159.0	
28	-	12.*							23+39	36.3	
29	-	12.*							24+65	35.9	
30	-	12.*							24+73	216.7	
31	-	12.*							25+40	197.7	
32	-	12.*							26+00	128.8	
33	-	12.*							26+40	127.6	
34	-	12.*							27+12	93.8	
35	-	12.*							27+40	202.2	
36	-	12.*							28+00	103.4	
37	-	12.*							28+31	226.0	
38	-	12.*							29+00	158.3	

```
 39      -  12.*                                        29+50       159.4
 40      -  12.*                                        30+00       239.8
 41      -  12.*                                        30+73        10.4
 42      -  12.*                                        30+76         8.6

 43      -  12.*                                        30+93        11.0
 44      -  12.*                                        30+95        18.0
 45      -  12.*                                        31+00       196.9
 46      -  12.*                                        31+60        84.3
 47      -  12.*                                        31+85        27.9

 48      -  12.*                                        32+13.5       8.2
 49      -  12.*                                        32+15        22.1
 50      -  12.*                                        32+20       101.6
 51      -  12.*                                        32+50       109.6
 52      -  12.*                                        32+82        10.0
 53      -  12.*                                        32+84        55.5
 54      -  12.*                                        33+00        50.8
 55      -  12.*                                        33+15        46.3

 56      -  12.*                                        35+38       278.9

 57      -  12.*                                        36+35       158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B        67.    500.   65.2
  2  2B         67.    500.   55.4
  3  5B         67.    500.   61.5
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.12.12.12.

12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.12.
 12.12.12.12.12.12.12.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT. WALL (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	14.*							21+65	178.6	
34	-	14.*							22+20	260.3	
35	-	14.*							23+00	138.6	
36	-	14.*							23+43	150.8	
37	-	14.*							23+90	159.0	
38	-	14.*							23+39	36.3	

```
 39      -  14.*                                          24+65        35.9
 40      -  14.*                                          24+73       216.7
 41      -  14.*                                          25+40       197.7
 42      -  14.*                                          26+00       128.8
 43      -  14.*                                          26+40       127.6

 44      -  14.*                                          27+12        93.8
 45      -  14.*                                          27+40       202.2
 46      -  14.*                                          28+00       103.4
 47      -  14.*                                          28+31       226.0
 48      -  14.*                                          29+00       158.3
 49      -  14.*                                          29+50       159.4
 50      -  14.*                                          30+00       239.8
 51      -  14.*                                          30+73        10.4
 52      -  14.*                                          30+76         8.6

 53      -  14.*                                          30+93        11.0
 54      -  14.*                                          30+95        18.0
 55      -  14.*                                          31+00       196.9
 56      -  14.*                                          31+60        84.3
 57      -  14.*                                          31+85        27.9

 58      -  14.*                                          32+13.5       8.2
 59      -  14.*                                          32+15        22.1
 60      -  14.*                                          32+20       101.6
 61      -  14.*                                          32+50       109.6
 62      -  14.*                                          32+82        10.0
 63      -  14.*                                          32+84        55.5
 64      -  14.*                                          33+00        50.8
 65      -  14.*                                          33+15        46.3

 66      -  14.*                                          35+38       278.9

 67      -  14.*                                          36+35       158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B        67.    500.   64.9
  2  2B         67.    500.   55.1
  3  5B         67.    500.   61.0
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
 14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.14.
```

SOUND32 - RELEASE 07/30/91, MODIFIED 04/22/00

TITLE:
FUTURE WITH MITIGATION EB. 14 FT and 16 FT. (No Wrap-around)

1

BARRIER DATA
****

BAR ELE	0	1	BARRIER HEIGHTS 2	3	4	5	6	7	BAR ID	LENGTH	TYPE
1	-	0.*							21+75	37.0	
2	-	0.*							21+80	66.5	
3	-	0.*							22+00	68.5	
4	-	0.*							22+20	292.3	
5	-	0.*							23+00	204.7	
6	-	0.*							23+55	87.2	
7	-	0.*							23+55	88.3	
8	-	0.*							23+80	24.6	
9	-	0.*							23+80	72.6	
10	-	0.*							24+00	83.4	
11	-	0.*							24+20	53.5	
12	-	0.*							24+33	69.4	
13	-	0.*							24+85	34.5	
14	-	0.*							24+85	68.2	
15	-	0.*							25+00	69.4	
16	-	0.*							25+20	44.9	
17	-	0.*							26+40	132.3	
18	-	0.*							26+80	100.7	
19	-	0.*							27+10	85.0	
20	-	0.*							27+10	90.2	
21	-	0.*							27+40	63.1	
22	-	0.*							27+60	30.9	
23	-	0.*							27+60	126.5	
24	-	0.*							28+00	10.2	
25	-	0.*							28+00	98.1	
26	-	0.*							28+65	66.2	
27	-	0.*							28+85	62.3	
28	-	0.*							29+19	183.2	
29	-	0.*							35+20	540.9	
30	-	0.*							36+85	49.3	
31	-	0.*							37+00	196.7	
32	-	0.*							37+60	217.0	
33	-	16.*							21+65	178.6	
34	-	16.*							22+20	260.3	
35	-	16.*							23+00	138.6	
36	-	16.*							23+43	150.8	
37	-	16.*							23+90	159.0	
38	-	16.*							23+39	36.3	

```
 39      -  16.*                                        24+65       35.9
 40      -  16.*                                        24+73      216.7
 41      -  16.*                                        25+40      197.7
 42      -  16.*                                        26+00      128.8
 43      -  16.*                                        26+40      127.6

 44      -  14.*                                        27+12       93.8
 45      -  14.*                                        27+40      202.2
 46      -  15.*                                        28+00      103.5
 47      -  15.*                                        28+31       67.2
 48      -  15.*                                        28+43        2.0
 49      -  16.*                                        28+43      158.8
 50      -  16.*                                        29+00      158.3
 51      -  16.*                                        29+50      159.4
 52      -  16.*                                        30+00      239.8
 53      -  16.*                                        30+73       10.4

 54      -  16.*                                        30+76        8.6

 55      -  16.*                                        30+93       11.0
 56      -  16.*                                        30+95       18.0
 57      -  16.*                                        31+00      196.9
 58      -  16.*                                        31+60       84.3
 59      -  16.*                                        31+85       27.9

 60      -  16.*                                        32+13.5      8.2
 61      -  16.*                                        32+15       22.1
 62      -  16.*                                        32+20      101.6
 63      -  16.*                                        32+50      109.6
 64      -  16.*                                        32+82       10.0
 65      -  16.*                                        32+84       55.5
 66      -  16.*                                        33+00       50.8
 67      -  16.*                                        33+15       46.3

 68      -  16.*                                        35+38      278.9

 69      -  16.*                                        36+35      158.1
 ------------------------------------------------------------------------
----
        0    1    2    3    4    5    6    7
1
 REC REC ID     DNL  PEOPLE   LEQ(CAL)
 --------------------------------
  1  17B        67.    500.   64.7
  2  2B         67.    500.   54.9
  3  5B         67.    500.   60.7
 BARRIER HEIGHT INDEX FOR EACH BARRIER SECTION
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
1
   1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1  1
 CORRESPONDING BARRIER HEIGHTS FOR EACH SECTION
  0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
0.
  0. 0. 0. 0. 0. 0.
0.16.16.16.16.16.16.16.16.16.16.16.14.14.15.15.15.16.16.
 16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.16.
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APPENDIX E

SOUNDWALL COST ANALYSIS (WORKSHEETS A AND B)

SUMMARY OF NOISE BARRIER REASONABLENESS (With Wrap-Around)

Sound Wall I.D.: SW-1 Critical Receiver No.: 1					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	72.8				
Build Vs. No-Build, dBA	1.9				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	4.9	7.6	9.7	11.3	12.6
No. of Benefited Residences	0	1	1	1	1
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$52,000	$54,000	$54,000	$54,000
Total Reasonable Allowance Per Benefited Residence	$0	$52,000	$54,000	$54,000	$54,000
Cost of Wall	$0	$93,150	$110,590	$128,580	$142,030
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-2 Critical Receiver No.: 7					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	71.4				
Build Vs. No-Build, dBA	0.8				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	6.1	7.9	9.5	10.9	12.0
No. of Benefited Residences	3	6	8	11	13
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$52,000	$52,000	$54,000	$54,000	$56,000
Total Reasonable Allowance Per Benefited Residence	$156,000	$312,000	$432,000	$594,000	$728,000
Cost of Wall	$272,000	$321,390	$381,560	$443,620	$490,030
Reasonable?	**FALSE**	**FALSE**	**TRUE**	**TRUE**	**TRUE**

Sound Wall I.D.: SW-3 Critical Receiver No.: 11					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	70.4				
Build Vs. No-Build, dBA	0.2				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.3/4.9 m (14/16 ft)**
Loss (Noise Reduction), dBA	3.9	6.0	7.8	9.3	9.4
No. of Benefited Residences	0	1	12	14	19
New Highway, or More Than 50% of Residences					
Predated 1978? (Yes or No)	NO	NO	NO	NO	NO
Reasonable Allowance Per Benefited Residence	$0	$40,000	$42,000	$44,000	$44,000
Total Reasonable Allowance Per Benefited Residence	$0	$40,000	$504,000	$616,000	$836,000
Cost of Wall	$0	$528,390	$627,320	$729,360	$788,060
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**TRUE**

Sound Wall I.D.: SW-4 Critical Receiver No.: 18					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	66.9				
Build Vs. No-Build, dBA	0.0				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	3.0	4.8	6.4	7.7	8.8
No. of Benefited Residences	0	0	2	3	4
New Highway, or More Than 50% of Residences	NO	NO	NO	NO	NO
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$40,000	$40,000	$40,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$80,000	$120,000	$160,000
Cost of Wall	$0	$0	$172,580	$200,660	$221,650
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

SUMMARY OF NOISE BARRIER REASONABLENESS

Sound Wall I.D.: SW-5 Critical Receiver No.: 21					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	65.7				
Build Vs. No-Build, dBA	2.0				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	2.2	3.7	5.0	6.2	7.2
No. of Benefited Residences	0	0	2	2	2
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$48,000	$50,000	$50,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$96,000	$100,000	$100,000
Cost of Wall	$0	$0	$206,100	$239,620	$264,690
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-6 Critical Receiver No.: 21M					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	71.8				
Build Vs. No-Build, dBA	2.3				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	2.7	3.1	4.6	5.7	6.5
No. of Benefited Residences	0	0	0	1	1
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$0	$50,000	$52,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$0	$50,000	$52,000
Cost of Wall	$0	$0	$0	$165,590	$182,910
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-9	Critical Receiver No.: 29				
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	72.5				
Build Vs. No-Build, dBA	2.6				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	2.6	3.4	4.5	5.3	6.4
No. of Benefited Residences	0	0	0	1	1
New Highway, or More Than 50% of Residences					
Predated 1978? (Yes or No)	YES	YES	YES	YES	YES
Reasonable Allowance Per Benefited Residence				$50,000	$52,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$0	$50,000	$52,000
Cost of Wall	$0	$0	$0	$313,650	$346,460
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-10	Critical Receiver No.: 30				
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	77.1				
Build Vs. No-Build, dBA	5.7				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	2.7	3.6	4.8	6.0	6.9
No. of Benefited Residences	0	0	0	2	2
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$0	$56,000	$56,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$0	$112,000	$112,000
Cost of Wall	$0	$0	$0	$282,480	$312,030
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-11	Critical Receiver No.: 32				
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	73.8				
Build Vs. No-Build, dBA	5.3				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	1.6	3.3	4.8	5.9	7
No. of Benefited Residences	0	0	0	1	1
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$0	$52,000	$54,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$0	$52,000	$54,000
Cost of Wall	$0	$0	$0	$114,940	$126,960
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-12	Critical Receiver No.: 34				
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	73.6				
Build Vs. No-Build, dBA	4.5				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	1.5	2.9	4.4	5.9	7.0
No. of Benefited Residences	0	0	0	2	2
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$0	$52,000	$54,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$0	$104,000	$108,000
Cost of Wall	$0	$0	$0	$327,280	$361,520
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-13	Critical Receiver No.: 35				
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	73.5				
Build Vs. No-Build, dBA	4.9				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	1.9	3.6	5.1	6.4	7.5
No. of Benefited Residences	0	0	1	1	1
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$0	$52,000	$54,000	$54,000
Total Reasonable Allowance Per Benefited Residence	$0	$0	$52,000	$54,000	$54,000
Cost of Wall	$0	$0	$174,260	$202,600	$223,800
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

SUMMARY OF NOISE BARRIER REASONABLENESS (Without Wrap-Around)

Sound Wall I.D.: SW-1 Critical Receiver No.: 1					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	72.8				
Build Vs. No-Build, dBA	1.9				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	4.8	7.3	9.2	10.6	11.5
No. of Benefited Residences	0	1	1	1	1
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$0	$52,000	$54,000	$54,000	$54,000
Total Reasonable Allowance	$0	$52,000	$54,000	$54,000	$54,000
Cost of Wall	$0	$77,620	$92,160	$107,150	$118,360
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**FALSE**

Sound Wall I.D.: SW-2 Critical Receiver No.: 7					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	71.4				
Build Vs. No-Build, dBA	0.8				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.9 m (16 ft)**
Loss (Noise Reduction), dBA	6.1	7.9	9.5	10.9	12.1
No. of Benefited Residences	3	6	7	10	13
New Highway, or More Than 50% of Residences	YES	YES	YES	YES	YES
Predated 1978? (Yes or No)					
Reasonable Allowance Per Benefited Residence	$52,000	$52,000	$54,000	$54,000	$56,000
Total Reasonable Allowance	$156,000	$312,000	$378,000	$540,000	$728,000
Cost of Wall	$257,290	$304,010	$360,930	$419,630	$463,530
Reasonable?	**FALSE**	**TRUE**	**TRUE**	**TRUE**	**TRUE**

Sound Wall I.D.: SW-3 Critical Receiver No.: 11					
PREDICTED , W/O SOUND WALL					
Absolute Noise Level, Leq(h), dBA	70.4				
Build Vs. No-Build, dBA	0.2				
PREDICTED , WITH SOUNDWALL	**H=2.4 m (8 ft)**	**H=3.05 m (10ft)**	**H=3.7 m (12 ft)**	**H=4.3 m (14ft)**	**H=4.3/4.9 m (14/16 ft)**
Loss (Noise Reduction), dBA	3.3	4.7	5.7	6.4	6.5
No. of Benefited Residences	0	0	12	14	19
New Highway, or More Than 50% of Residences					
Predated 1978? (Yes or No)	NO	NO	NO	NO	NO
Reasonable Allowance Per Benefited Residence	$0	$0	$40,000	$42,000	$42,000
Total Reasonable Allowance	$0	$0	$480,000	$588,000	$798,000
Cost of Wall	$0	$0	$613,840	$713,680	$742,550
Reasonable?	**FALSE**	**FALSE**	**FALSE**	**FALSE**	**TRUE**

WORKSHEET "A" FOR CALCULATING (8 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location: SW-1	SW-1	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1	Critical Receiver No.	1		
Wall Height	8 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$50,000**

Continue on Worksheet B

Traffic Noise Analysis Protocal
For New Highway and Highway Reconstruction Projects
August 2006

WORKSHEET "A" FOR CALCULATING (10 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0			Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-1	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	10 Feet		Address	0	
Project Engineer: David	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000				$0
70-74 dBA:	Add $4,000		X		$4,000
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000		X		$2,000
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		Yes		$10,000
NO on both:	Add $0		No		$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-1	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		X	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0			Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-1	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		**X**	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		**X**	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		**Yes**	$10,000
NO on both:		Add $0		**No**	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (16 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location: SW-1	SW-1	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	16 Feet		Address		
Project Engineer	David		City		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		X	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (8 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2	Critical Receiver No.	7		
Wall Height	8 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (10 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	10 Feet		Address	0	
Project Engineer: David	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000	**X**		$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000	**X**		$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:		Add $10,000	**Yes**		$10,000
NO on both:		Add $0	**No**		$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000	**X**		$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000	**X**		$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:		Add $10,000	**Yes**		$10,000
NO on both:		Add $0	**No**		$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (14 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000	**X**		$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000	**X**		$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:		Add $10,000	**Yes**		$10,000
NO on both:		Add $0	**No**		$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (16 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	16 Feet		Address		
Project Engineer	David		City		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000				$0
70-74 dBA:	Add $4,000		**X**		$4,000
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000				$0
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000		**X**		$6,000
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**Yes**		$10,000
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$56,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (10 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	10 Feet		Address	0	
Project Engineer: David	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		No	$0
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$42,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (12 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		No	$0
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$42,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		X	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		No	$0
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$44,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	16 Feet		Address		
Project Engineer	David		City		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		X	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		No	$0
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$44,000**

Continue on Worksheet B

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WORKSHEET "A" FOR CALCULATING (8 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0			Project E.A. Number	86900
Noise Barrier I.D. & Location: SW-1	SW-1	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1	Critical Receiver No.	1		
Wall Height	8 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000				$0
70-74 dBA:	Add $4,000		**X**		$4,000
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000				$0
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**Yes**		$10,000
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$50,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (10 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-1	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	10 Feet		Address	0	
Project Engineer: David	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		**X**	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		**X**	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		**Yes**	$10,000
NO on both:		Add $0		**No**	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-1	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		**X**	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		**X**	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		**Yes**	$10,000
NO on both:		Add $0		**No**	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-1	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000	**X**		$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000	**X**		$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:		Add $10,000	**Yes**		$10,000
NO on both:		Add $0	**No**		$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (16 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy		0		Project E.A. Number	86900
Noise Barrier I.D. & Location: SW-1	SW-1	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-1		Critical Receiver No.	1	
Wall Height	16 Feet		Address		
Project Engineer	David		City		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000		X	$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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For New Highway and Highway Reconstruction Projects
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WORKSHEET "A" FOR CALCULATING (8 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	8 Feet		Address		
Project Engineer	David		City	San Juan Capistrano	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

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WORKSHEET "A" FOR CALCULATING (10 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	10 Feet		Address	0	
Project Engineer: David	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

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For New Highway and Highway Reconstruction Projects
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WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000				$0
70-74 dBA:	Add $4,000		**X**		$4,000
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000				$0
9-11 dBA:	Add $4,000		**X**		$4,000
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**Yes**		$10,000
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

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For New Highway and Highway Reconstruction Projects
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WORKSHEET "A" FOR CALCULATING (14 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-2	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2		Critical Receiver No.	7	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000	**X**		$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000	**X**		$4,000
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:		Add $10,000	**Yes**		$10,000
NO on both:		Add $0	**No**		$0
Unmodified Reasonable Allowance Per Residence					**$54,000**

Continue on Worksheet B

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WORKSHEET "A" FOR CALCULATING (16 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy		0	Project E.A. Number		86900
Noise Barrier I.D. & Location:	SW-2	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-2	Critical Receiver No.	7		
Wall Height	16 Feet	Address			
Project Engineer	David	City			
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000				$0
70-74 dBA:	Add $4,000		**X**		$4,000
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000				$0
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000		**X**		$6,000
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**Yes**		$10,000
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$56,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	12 Feet		Address	0	
Project Engineer	0		City	0	
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		**X**	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		**No**	$0
NO on both:		Add $0		**No**	$0
Unmodified Reasonable Allowance Per Residence					**$40,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	14 Feet		Address	0	
Project Engineer	0		City	0	

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000	X	$4,000
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000		$0
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	No	$0
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$42,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-3	Without Wrap-Around Wall		Date	5/7/2008
Wall Number/Wall Section	SW-3		Critical Receiver No.	11	
Wall Height	16 Feet		Address		
Project Engineer	David		City		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		No	$0
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$42,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (12 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-4			Date	5/29/2008
Wall Number/Wall Section	SW-4	Critical Receiver No.	18		
Wall Height	12 Feet	Address	0		
Project Engineer	0	City	0		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000		**X**		$2,000
70-74 dBA:	Add $4,000				$0
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000		**X**		$2,000
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**No**		$0
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$40,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-4			Date	5/29/2008
Wall Number/Wall Section	SW-4	Critical Receiver No.	18		
Wall Height	14 Feet	Address	0		
Project Engineer	0	City	0		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000		**X**		$2,000
70-74 dBA:	Add $4,000				$0
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000		**X**		$2,000
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**No**		$0
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$40,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-4			Date	5/29/2008
Wall Number/Wall Section	SW-4	Critical Receiver No.	18		
Wall Height	16 Feet	Address			
Project Engineer	David	City			
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)			Check		
69 dBA or Less	Add $2,000		**X**		$2,000
70-74 dBA:	Add $4,000				$0
75-78 dBA:	Add $6,000				$0
More Than 78dBA:	Add $8,000				$0
2) "Build" VS Existing Noise Level (Choose One)			Check		
Less than 3 dBA:	Add $ 0				$0
3-7 dBA:	Add $2,000				$0
8-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
3) Achievable Noise Reduction (Choose One)			Check		
Less than 6 dBA:	Add $0				$0
6-8 dBA:	Add $2,000		**X**		$2,000
9-11 dBA:	Add $4,000				$0
12 dBA or more:	Add $6,000				$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)			Check		
YES on either one:	Add $10,000		**No**		$0
NO on both:	Add $0		**No**		$0
Unmodified Reasonable Allowance Per Residence					**$40,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (12 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-5			Date	5/29/2008
Wall Number/Wall Section	SW-5	Critical Receiver No.	21		
Wall Height	12 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000		**X**	$2,000
70-74 dBA:		Add $4,000			$0
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		**Yes**	$10,000
NO on both:		Add $0		**No**	$0
Unmodified Reasonable Allowance Per Residence					**$48,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-5	Date	5/29/2008
Wall Number/Wall Section	SW-5	Critical Receiver No.	21
Wall Height	14 Feet	Address	0
Project Engineer	0	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000	**X**	$2,000
70-74 dBA:	Add $4,000		$0
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000		$0
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	**X**	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	**Yes**	$10,000
NO on both:	Add $0	**No**	$0
Unmodified Reasonable Allowance Per Residence			**$50,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-5	Date	5/29/2008
Wall Number/Wall Section	SW-5	Critical Receiver No.	21
Wall Height	16 Feet	Address	
Project Engineer	David	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000	X	$2,000
70-74 dBA:	Add $4,000		$0
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000		$0
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$50,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-6			Date	5/29/2008
Wall Number/Wall Section	SW-6	Critical Receiver No.	21M		
Wall Height	14 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2006 Dollars)					$36,000
Update for Year 2006					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$50,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-6			Date	5/29/2008
Wall Number/Wall Section	SW-6	Critical Receiver No.	21M		
Wall Height	16 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-9			Date	5/29/2008
Wall Number/Wall Section	SW-9	Critical Receiver No.	29		
Wall Height	14 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000			$0
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$50,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-9	Date	5/29/2008
Wall Number/Wall Section	SW-9	Critical Receiver No.	29
Wall Height	16 Feet	Address	
Project Engineer	David	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000	X	$4,000
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000		$0
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$52,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-10	Date	5/23/2008
Wall Number/Wall Section	SW-10	Critical Receiver No.	31 K5
Wall Height	14 Feet	Address	0
Project Engineer	0	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000		$0
75-78 dBA:	Add $6,000	X	$6,000
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000	X	$2,000
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$56,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-10	Date	5/23/2008
Wall Number/Wall Section	SW-10	Critical Receiver No.	31 K5
Wall Height	16 Feet	Address	
Project Engineer	David	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000		$0
75-78 dBA:	Add $6,000	X	$6,000
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000	X	$2,000
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$56,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-11			Date	5/29/2008
Wall Number/Wall Section	SW-11	Critical Receiver No.	32		
Wall Height	14 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000		X	$2,000
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-11	Date	5/29/2008
Wall Number/Wall Section	SW-11	Critical Receiver No.	32
Wall Height	16 Feet	Address	
Project Engineer	David	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000	X	$4,000
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000	X	$2,000
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000	X	$2,000
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$54,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (14 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name	0	Project E.A. Number	86900
Noise Barrier I.D. & Location:	SW-12	Date	5/29/2008
Wall Number/Wall Section	SW-12	Critical Receiver No.	34
Wall Height	14 Feet	Address	0
Project Engineer	0	City	San Juan Capistrano

Base Allowance (2007 Dollars)			$36,000
Update for Year 2007			
1) Absolute Noise Levels (Choose One)		Check	
69 dBA or Less	Add $2,000		$0
70-74 dBA:	Add $4,000	X	$4,000
75-78 dBA:	Add $6,000		$0
More Than 78dBA:	Add $8,000		$0
2) "Build" VS Existing Noise Level (Choose One)		Check	
Less than 3 dBA:	Add $ 0		$0
3-7 dBA:	Add $2,000	X	$2,000
8-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
3) Achievable Noise Reduction (Choose One)		Check	
Less than 6 dBA:	Add $0		$0
6-8 dBA:	Add $2,000		$0
9-11 dBA:	Add $4,000		$0
12 dBA or more:	Add $6,000		$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)		Check	
YES on either one:	Add $10,000	Yes	$10,000
NO on both:	Add $0	No	$0
Unmodified Reasonable Allowance Per Residence			**$52,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-12			Date	5/29/2008
Wall Number/Wall Section	SW-12	Critical Receiver No.	34		
Wall Height	16 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000		X	$2,000
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (12 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-13			Date	5/29/2008
Wall Number/Wall Section	SW-13	Critical Receiver No.	35		
Wall Height	12 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000		X	$2,000
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000			$0
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$52,000**

Continue on Worksheet B

WORKSHEET "A" FOR CALCULATING (14 foot wall)
REASONABLE ALLOWANCE PER RESIDENCE

Project Name; Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-13			Date	5/29/2008
Wall Number/Wall Section	SW-13	Critical Receiver No.	35		
Wall Height	14 Feet	Address	0		
Project Engineer	0	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000		X	$2,000
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

WORKSHEET "A" FOR CALCULATING (16 foot wall) REASONABLE ALLOWANCE PER RESIDENCE

Project Name: Ortega Hwy	0		Project E.A. Number	86900	
Noise Barrier I.D. & Location:	SW-13			Date	5/29/2008
Wall Number/Wall Section	SW-13	Critical Receiver No.	35		
Wall Height	16 Feet	Address			
Project Engineer	David	City	San Juan Capistrano		
Base Allowance (2007 Dollars)					$36,000
Update for Year 2007					
1) Absolute Noise Levels (Choose One)				Check	
69 dBA or Less		Add $2,000			$0
70-74 dBA:		Add $4,000		X	$4,000
75-78 dBA:		Add $6,000			$0
More Than 78dBA:		Add $8,000			$0
2) "Build" VS Existing Noise Level (Choose One)				Check	
Less than 3 dBA:		Add $ 0			$0
3-7 dBA:		Add $2,000		X	$2,000
8-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
3) Achievable Noise Reduction (Choose One)				Check	
Less than 6 dBA:		Add $0			$0
6-8 dBA:		Add $2,000		X	$2,000
9-11 dBA:		Add $4,000			$0
12 dBA or more:		Add $6,000			$0
4) Either New Construction or Pre-dated 1978 ? (choose Yes or No)				Check	
YES on either one:		Add $10,000		Yes	$10,000
NO on both:		Add $0		No	$0
Unmodified Reasonable Allowance Per Residence					**$54,000**
Continue on Worksheet B					

WORKSHEET "B" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

Project Name: SR-74 Ortega Highway (With Wrap-Around Scenario)
EA No.: 86900
Date: 5/7/2008
City: San Juan Capistrano
Project Engineer: David
Total Project Cost: $41,000,000

Noise Barrier I.D.	Reasonable Allowance Per Benefited Residence	No Of Benefited Residences	Reasonable Allowance Per Noise Barrier	Fraction of Total Reasonable Allowance	Reduction of Reasonable Allowance Per Noise Barrier	Reduction of Reasonable Allowance Per Benefited Residence	Modified Reasonable Allowance Per Benefited Residence
SW-1	$54,000	1	$54,000.00				
SW-2	$56,000	13	$728,000.00				
SW-3	$44,000	19	$836,000.00				
SW-4	$40,000	4	$160,000.00				
SW-5	$50,000	2	$100,000.00				
SW-6	$52,000	1	$52,000.00				
SW-9	$52,000	1	$52,000.00				
SW-10	$56,000	2	$112,000.00				
SW-11	$54,000	1	$54,000.00				
Total Reasonable Allowance Per Abatement			$2,148,000.00	0.00			
Estimated Project Cost			$20,500,000.00				
Subtract Estimated Project Cost from Total Reasonable Allowance For Abatement. If result is Zero, Stop. Use the reasonable allowance per residence in Column (a) above. If result is greater than Zero, the amount is Total Allowance Excess (Et), continue with Columns (d) through)g)			-$18,352,000.00				

WORKSHEET "B" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

Project Name: SR-74 Ortega Highway (Without Wrap-Around Scenario)
EA No.: 86900
Date: 5/7/2008
City: San Juan Capistrano
Project Engineer: David
Total Project Cost: $41,000,000

Noise Barrier I.D.	Reasonable Allowance Per Benefited Residence	No Of Benefited Residences	Reasonable Allowance Per Noise Barrier	Fraction of Total Reasonable Allowance	Reduction of Reasonable Allowance Per Noise Barrier	Reduction of Reasonable Allowance Per Benefited Residence	Modified Reasonable Allowance Per Benefited Residence
SW-1	$54,000	1	$54,000.00				
SW-2	$56,000	13	$728,000.00				
SW-3	$42,000	19	$798,000.00				
SW-4	$40,000	4	$160,000.00				
SW-5	$50,000	2	$100,000.00				
SW-6	$52,000	1	$52,000.00				
SW-9	$52,000	1	$52,000.00				
SW-10	$56,000	2	$112,000.00				
SW-11	$54,000	1	$54,000.00				
Total Reasonable Allowance Per Abatement			$2,110,000.00	0.00			
Estimated Project Cost			$20,500,000.00				
Subtract Estimated Project Cost from Total Reasonable Allowance For Abatement. If result is Zero, Stop. Use the reasonable allowance per residence in Column (a) above. If result is greater than Zero, the amount is Total Allowance Excess (Et), continue			-$18,390,000.00				

WORKSHEET "B" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

City of San Juan Capistrano Limits for EIR section

Project Name: SR-74 Ortega Highway (With Wrap-Around Scenario)
EA No.: 86900
Date: 5/7/2008
City: San Juan Capistrano
Project Engineer: David
Total Project Cost: $17,440,000

Noise Barrier I.D.	Reasonable Allowance Per Benefited Residence	No Of Benefited Residences	Reasonable Allowance Per Noise Barrier	Fraction of Total Reasonable Allowance	Reduction of Reasonable Allowance Per Noise Barrier	Reduction of Reasonable Allowance Per Benefited Residence	Modified Reasonable Allowance Per Benefited Residence
SW-1	$54,000	1	$54,000.00				
SW-2	$56,000	13	$728,000.00				
SW-3	$44,000	19	$836,000.00				
SW-4	$40,000	4	$160,000.00				
SW-5	$50,000	2	$100,000.00				
SW-9	$52,000	1	$52,000.00				
SW-10	$56,000	2	$112,000.00				
SW-11	$54,000	1	$54,000.00				
Total Reasonable Allowance Per Abatement			$2,096,000.00	0.00			
Estimated Project Cost			$8,720,000.00				
Subtract Estimated Project Cost from Total Reasonable Allowance For Abatement. If result is Zero, Stop. Use the reasonable allowance per residence in Column (a) above. If result is greater than Zero, the amount is Total Allowance Excess (Et), continue			-$6,624,000.00				

WORKSHEET "B" FOR CALCULATING REASONABLE ALLOWANCE PER RESIDENCE

City of San Juan Capistrano Limits for EIR section

Project Name: SR-74 Ortega Highway (Without Wrap-Around Scenario)
EA No.: 86900
Date: 5/7/2008
City: San Juan Capistrano
Project Engineer: David
Total Project Cost: $17,440,000

Noise Barrier I.D.	Reasonable Allowance Per Benefited Residence	No Of Benefited Residences	Reasonable Allowance Per Noise Barrier	Fraction of Total Reasonable Allowance	Reduction of Reasonable Allowance Per Noise Barrier	Reduction of Reasonable Allowance Per Benefited Residence	Modified Reasonable Allowance Per Benefited Residence
SW-1	$54,000	1	$54,000.00				
SW-2	$56,000	13	$728,000.00				
SW-3	$42,000	19	$798,000.00				
SW-4	$40,000	4	$160,000.00				
SW-5	$50,000	2	$100,000.00				
SW-9	$52,000	1	$52,000.00				
SW-10	$56,000	2	$112,000.00				
SW-11	$54,000	1	$54,000.00				
Total Reasonable Allowance Per Abatement			$2,058,000.00	0.00			
Estimated Project Cost			$8,720,000.00				
Subtract Estimated Project Cost from Total Reasonable Allowance For Abatement. If result is Zero, Stop. Use the reasonable allowance per residence in Column (a) above. If result is greater than Zero, the amount is Total Allowance Excess (Et), continue			-$6,662,000.00				

APPENDIX F

GROUND-BORNE VIBRATION CALCULATION

Ground-borne Vibration Calculation

1. Closest residence is located approximately 25 ft from the edge of Ortega Highway at the southeast corner of Calle Entradero and Ortega Highway.

Given:

1. A vibratory steel wheel roller generates a vibration level of 0.210 PPV (in/sec) at 25 feet.
2. Residential structure is located approximately 25 feet from vibratory steel wheel roller.

Equation:

$PPV_{equipment} = PPV_{ref} (25/D)^{n}$

PPVref = reference PPV at 25 feet
D = Distance from equipment to the receiver in feet
n = 1.1 (value related to the attenuation rate through ground)

Calculation:

$PPV_{equipment} = 0.210 (25/25)^{1.1}$

$PPV_{equipment} = 0.210$ PPV (in/sec)

2. Closest historical residence and garage is located approximately 50 ft and 20 ft from the edge of Ortega Highway, respectively, at the southwest corner of Via Cristal and Ortega Highway.

Given:

1. A vibratory steel wheel roller generates a vibration level of 0.210 PPV (in/sec) at 25 feet.
2. Residential structure is located approximately 50 feet from vibratory steel wheel roller.
3. Garage structure is located approximately 20 feet from vibratory steel wheel roller.

Equation:

$PPV_{equipment} = PPV_{ref} (25/D)^n$

PPVref = reference PPV at 25 feet
D = Distance from equipment to the receiver in feet
n = 1.1 (value related to the attenuation rate through ground)

Calculation (garage structure):

$PPV_{equipment} = 0.210 (25/20)^{1.1}$

$PPV_{equipment} = 0.268$ PPV (in/sec)

Calculation (residence structure):

$PPV_{equipment} = 0.210 (25/50)^{1.1}$

$PPV_{equipment} = 0.098$ PPV (in/sec)

Table 18. Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV at 25 ft. (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Crack-and-seat operations	2.4

Sources: Federal Transit Administration 1995 (except Hanson 2001 for vibratory rollers) and Caltrans 2000 for crack-and seat-operations.

Using these source levels, vibration from this equipment can be estimated by the following formula:

$$PPV_{Equipment} = PPV_{Ref}(25/D)^n \quad (in/sec) \qquad (Eq.\ 12)$$

Where:

PPV_{Ref} = *reference PPV at 25 ft.*
D = *distance from equipment to the receiver in ft.*
n = *1.1 (the value related to the attenuation rate through ground)*

The suggested value for "n" is 1.1. Because vibration from this equipment originates primarily near the ground surface, modifying the value of "n" based on soil classification may not necessarily be applicable; however, a higher value of "n" based on site-specific soil conditions could be used for a less-conservative estimation of vibration amplitude. FTA recommends a value of "n" of 1.5 for vibration assessment. Using a value of 1.5 is less conservative than using a value of 1.4 or less (as indicated in Table 17) because it assumes that vibration will attenuate at a greater rate.

C. Evaluating Potential Vibration Impacts

As shown in Chapter 6, there is limited consistency between the categorization of effects and damage thresholds; however, it is apparent that damage thresholds for continuous sources are less than those for single-event or transient sources. It is also apparent that the vibration from traffic is continuous and that vibration from a single blasting event is a single transient event; however, many types of construction activities fall between a single event and a continuous source. An impact pile driver, for example, continuously generates single transient events. As a practical matter and based on the nature of available criteria, the criteria can only be reasonably separated into two categories: continuous and transient.

To assess the damage potential from ground vibration induced by construction equipment, a synthesis of various vibration criteria presented in Chapter 6 has been developed. This synthesis of criteria essentially assumes that the threshold for continuous sources is about half of the threshold for transient sources. A vibration amplitude predicted using Eqs. 9–12 can be compared the criteria in Tables 19 and 20 to evaluate the potential for damage.

Table 19. Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

A similar synthesis of criteria relating to human perception has also been developed and is summarized in Table 19. A vibration amplitude predicted with Eqs. 1–4 can be compared to the criteria in Table 20 for a simple evaluation of the potential for annoyance and adverse impact. Some individuals may be annoyed at barely perceptible levels of vibration, depending on the activities in which they are participating.

Table 20. Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Example Calculations

Example 1: An 80,000 ft-lb. pile driver will be operated at 100 ft. from a new office building and 100 ft. from a historic building known to be fragile. Evaluate the potential for damage to the buildings and annoyance to the building occupants. No information on the soil conditions is known.

Use Eq. 10 to estimate the PPV from the pile driving at 100 ft. In the absence of soil information, use N = 1.1.

$$PPV = 0.65\ (25/100)^{1.1}\ X\ (80{,}000/36{,}000)^{0.5} = 0.21\ in/sec$$

Table 19 suggests that an appropriate damage potential threshold for new commercial buildings is 0.5 in/sec when the source is continuous. The predicted vibration amplitude of 0.21 in/sec is well below this value, indicating low potential for structural damage to the building.